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## Labour and birth information needs of first time mothers in Malawi and satisfaction with information received

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**LABOUR AND BIRTH INFORMATION NEEDS OF FIRST  
TIME MOTHERS IN MALAWI AND SATISFACTION WITH  
INFORMATION RECEIVED**

By

Address Mauakowa Malata  
Bsc. Nursing (Malawi)

A Thesis Submitted in Partial Fulfilment of the  
Requirements for the Award of

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at the School of Nursing

Edith Cowan University

Date of Submission: February 1997

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

## ABSTRACT

Giving labour and birth information to first time mothers is one of the challenges facing the midwives in Malawi. There are many underlying health and socioeconomic problems facing the people of Malawi particularly mothers in the child bearing age because of inadequate human and material resources in the health sector. This thesis presents findings of a study carried out in Malawi to explore labour and birth information given to first time mothers at hospitals and in the communities. Maternal satisfaction with the information received was determined. In addition labour and birth information needs of first time mothers in Malawi were determined from the mother's perspective. A descriptive-correctional design was used in this study. One hundred and fifty first time mothers who had given birth to a live full term infant within 8 weeks of the postpartum period participated in the study. The findings of the quantitative results were analysed using SPSS for Windows. Responses to open ended questions were analysed using content analysis. The findings indicated that first time mothers believe that they are not given adequate labour and birth information in the hospital settings. The findings also indicated that labour and birth information given in the community is culturally based and mainly comprises cultural beliefs and taboos of childbirth. First time mothers in Malawi also expressed satisfaction with some of the information given during pregnancy, labour and birth but were not satisfied overall with the amount of information they received in preparing them for childbirth. The findings of the study have implications for improving how and what labour and birth information is given to first time mothers in Malawi. Recommendations are presented for nurse/midwifery practice, education, management and research.

## **DECLARATION**

"I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Date: 5.2.99

Signature:

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## CHAPTER ONE

### Introduction

Giving adequate labour and birth information to first time mothers is one of the greatest challenges facing the midwifery profession in Malawi because of many existing health and socioeconomic problems. This study explored labour and birth information needs of first time mothers in Malawi and determined their level of satisfaction with the information they currently receive during the antenatal, labour and birth period. As there was no baseline data of this type, a descriptive-correlational survey approach was the most appropriate approach for providing a meaningful account of the current status quo. The study was based on the assumption that giving quality labour and birth information to first time mothers during pregnancy, labour and birth periods results in greater satisfaction with their childbirth experience. The study has implications for improving the current methods of giving labour and birth information to first time mothers in Malawi.

### Background of the Study

At the 1986 World Health Organisation conference in Geneva, it was reported that, globally each year, half a million women die and seven and a half million are left permanently handicapped as a result of childbirth. Of these deaths 88% to 98% could have been avoided (Maclean, 1993). Important to this study is the fact that 150,000 of the deaths occur in Africa, whereas only 6000 occur in developed countries with the remainder from Asia and Latin America. Kwast (1993) asserts that maternal mortality is a neglected tragedy because those who suffer it are neglected people, with the least power and limited resources.

In Africa, the complexity of maternal mortality is aggravated by factors such as women's low educational status and poverty which are the root of poor health, high fertility and lack of access to essential health care (Kwast, 1991). Most of these deaths are caused by haemorrhage, induced abortion, pregnancy induced hypertension, sepsis and obstructed labour. Of interest to this study is the fact that

parity and age of women increases their chances of dying. The adolescents and older women above 40 years of age are at a high risk for death in childbirth (Kwast, 1992).

Malawi is considered to be one of the countries in Africa with high maternal and infant mortality rates. The maternal mortality rate is 620 per 100,000 live births, and the infant mortality rate is 134 per 1,000 live births (Malawi Demographic and Health Survey, 1992). In Malawi, marriage and childbirth of the first baby occur at an early age. On average these mothers get married and immediately start child bearing at an age of 17 years and this contributes to increased maternal and infant deaths (Situation Analysis of Poverty in Malawi, 1993).

There are efforts to reduce maternal deaths world wide. In 1987 the Safe Motherhood Initiative was started with the aim of halving the deaths by the year 2000. Many programmes and projects were introduced world wide to address the possible causes of these deaths. The emphasis is on strengthening education to mothers particularly in Africa where some of the problems occur due to lack of knowledge. The high mortality rates also raised an alarm at the World Summit for Social Development where a goal was set to halve maternal deaths by the year 2000 (Grant, 1995). Education of mothers at risk was the most frequently cited strategy for meeting this goal.

Health Services in Malawi. The Ministry of Health in Malawi plays a major role in the provision of health services. Non-governmental institutions under the Christian Health Association of Malawi are also involved in health care delivery. Although 85% of the household population are reported to live within eight kilometres of fixed health facilities, geographic proximity does not guarantee access to professional staff and services because health personnel, supplies and affordable transport are often inadequate (Situation Analysis of Poverty in Malawi, 1993).

Maternal and child health issues are considered to be integral in the overall social and economic development of Malawi because of the high maternal and infant mortality rates. The findings of the Malawi Demographic and Health Survey (1992) further indicated that the high mortality rates were associated with low

socioeconomic status, inadequate maternal education, short intervals between births, low utilisation of maternal and child health services and unsafe cultural practices. For further background information on Malawi refer to Appendix A.

The problems of high maternal and infant mortality rates, low utilisation of maternal and child health services as well as unsafe cultural practices are already recognised and led the government to draw up a National Health Plan in 1986. One of the main goals of the Health Plan was to expand the range and quality of maternal and child health services. These services included antenatal, labour, birth and postnatal care, plus special clinics for child spacing (family planning) and clinics for children under five years of age (Malawi National Health Plan, 1986-1995).

Previous surveys done in Malawi indicate that use of available modern health services such as antenatal care, labour, birth, postnatal care, child care and child spacing services in Malawi is low, especially in the rural communities. Statistics reveal that nearly 50% of the people in the rural communities seek traditional medical services. Overall, 44% of both rural and urban pregnant women seek traditional services first before seeking modern health services (Malawi Demographic and Health Survey, 1992; Malawi National Health Plan, 1986-1995). The choice of services depends on personal preference and the availability of the services. Sometimes a pregnant woman may have to walk a long distance to the nearest modern health facility and yet she may have a traditional service within a short walking distance such as a traditional birth attendant or sometimes a relative who can assist with the birth of the baby. The government allows traditional birth attendants to conduct births and antenatal clinics. The problem that occurs is that some high risk mothers, such as first time mothers, decide to use traditional services despite being advised to attend modern health services to guard against possible complications such as obstructed labour and haemorrhage which can lead to morbidity and mortality. For example, sometimes mothers may be kept at home or at a traditional birth attendants clinic for several days while in labour due to transport

problems or due to some traditional beliefs such as prolonged labour being viewed as a sign of unfaithfulness by the woman or the man responsible for the pregnancy.

In Malawi, childbirth information for all mothers during the antenatal, labour and birth periods is provided mainly by midwives, traditional counsellors, female relatives, peers, friends and the media. Information given by midwives consists of what they consider to be important, based on their educational background. The information is given on a clinic day or in the antenatal ward to a group of first time and experienced mothers together (Appendix B). Statistics on attendance at antenatal clinics in Malawi indicated that 62.8% of the pregnant women attended for more than four times, 25.7% attended two to three times, 2% attended only once and 7.2% of women never attended any antenatal clinic (Malawi Demographic and Health Survey, 1992). The extent to which the mothers get information depends on the number of antenatal visits as well as the content of the health talks. Information from midwives is offered in a highly structured lecture during the first hour of each antenatal visit and as needed during labour and birth. The topics are ad hoc and the midwife decides on the topic to teach at a particular session.

It is clear from this background description that there is inconsistency of information given to the mothers because there is no set policy as to what information should be given. In addition, often there may be inadequate coverage of information given to mothers or some mothers may hear the same topic more than once and not hear anything on other topics throughout pregnancy.

Information given by traditional counsellors, traditional birth attendants, female relatives and friends is based on what they consider to be important, reflecting various cultural beliefs and values. Information given by traditional counsellors and or traditional birth attendants is given at specially organised sessions in the communities during pregnancy. The traditional counsellors and birth attendants are usually elderly, respected women who are well known in their communities, and experienced mothers in their own right. They are either chosen by the people in the community or they inherit the responsibility from their mothers, grandmothers or

aunts. Their status is usually derived from a lengthy apprenticeship with a person who has worked as a traditional counsellor for some years. Their role is recognised as part of the Malawian culture.

However, there are problems that are associated with the type of information given by traditional counsellors, traditional birth attendants, family relatives and friends. Traditional counselling has been associated with some unsafe cultural practices such that some complications that occur during labour and birth are due to unsafe cultural information which was given to the mothers during counselling sessions. Some information given may cause a lot of fears in mothers because they are given restrictions about behaviour and practices during pregnancy, labour and birth which they are told can lead to problems such as prolonged labour or death of the baby and mother. In addition, some of the practices such as drinking traditional mixtures during pregnancy, labour and birth have not been researched to validate their effects and the safety of the mother and baby.

### Statement of the Problem

Information needs of first time mothers are quite complex because child bearing is a time of great change accompanied by physical, emotional and social changes (Brook, 1995). Research studies performed in Western cultures reveal that childbirth education leads to increased sense of control during labour, a decreased perception of pain, decreased anxiety, decreased use of analgesics, and increased confidence in coping with labour for some women (Creedy, 1995; Gould, 1995; Mackay, 1990). The need is emphasised for giving adequate childbirth information to mothers especially those who are anticipating their first labour and birth experience.

From clinical experience and observation it is apparent that although the government has attempted to improve the quality of maternal services, first time mothers in Malawi do not get adequate information about labour and birth during pregnancy, labour and birth particularly at modern health institutions. In addition,

there is inadequate coverage of labour and birth information during pregnancy, labour and birth as well as differences in the type of information given at home and at the hospital. First time mothers in Malawi also receive traditional culturally based information which is given by traditional counsellors and/or traditional birth attendants and female relatives which may have both positive and negative effects on the mother and baby.

Given the challenges Malawi as a nation is facing, such as high maternal and infant mortality rates, low utilisation of services, potentially unsafe cultural practices, it is necessary to establish baseline data on which to develop intervention strategies. This study provides information regarding labour and birth information given to first time mothers in Malawi and determined their satisfaction with information they received in an effort to contribute to the national and international efforts to improve quality of care. In addition, the study provides information that may help in reduction of maternal morbidity and mortality.

### Significance of the Study

Research studies have been carried out in developed countries on childbirth education and its impact on child birth experiences of first time parents (Crowe & Baeyer, 1989; Green, Coupland & Kizinger, 1990; Mollart, 1995; Nicholas, 1995; Simkin, 1991). Other studies have examined childbirth information needs of parents (Freda, Anderson, Damus & Merkatz, 1993; Jacoby, 1988; Jambunathan & Stewart, 1995) but no study of this nature has been done in Malawi. It was apparent that there were no data for these issues in a Malawian context bearing in mind that the previous studies were performed amongst people with different socioeconomic and cultural backgrounds. The results for this study provide the data on labour and birth information given to first time mothers in Malawi and also their perceived labour and birth information needs.

Assessing patients' satisfaction with care is important because it helps to assess the efficiency and quality of care. There are many research studies which have been

conducted worldwide on satisfaction with maternity care (Alexander, Candridge & Moore, 1993; Bond & Thomas, 1992; Bramadat & Driedger, 1993; Cottrell & Grubbs, 1994; Kerssens, 1994). However, no studies of this nature have previously been conducted in developing countries such as Malawi. The study's results provide data for the efficiency and quality of the information given to first time mothers particularly by midwives, traditional counsellors/ traditional birth attendants, female relatives and friends in Malawi.

Information obtained from this study may also be used as baseline data for formulating new educational programmes for first time mothers in Malawi having identified their perceived educational needs. In addition, the findings of this study provide a basis for developing patient centred, culturally sensitive, quality education which in turn may contribute to improved quality of life and reduced maternal and infant mortality rates.

### Purpose of the Study

The purpose of this study was to describe the labour and birth information needs of first time mothers in Malawi. In addition, it was to determine their satisfaction with labour and birth information. Furthermore, it was to determine the first time mothers' perception of informational and emotional support received during pregnancy, labour and birth. The following were the specific objectives:

1. To determine labour and birth information given to first time mothers in Malawi;
2. To determine the level of satisfaction with the labour and birth information first time mothers received;
3. To determine perceived labour and birth information needs of first time mothers in Malawi;
4. To determine first time mothers' perceptions of informational and emotional support given by midwives and traditional helpers (traditional counsellors and traditional birth attendants) during pregnancy, labour and birth;

5. To determine if there was a relationship between the total amount of labour and birth information the mother received and overall satisfaction with information received in preparation for labour and birth;
6. To determine if there was a relationship between the total labour and birth information the mother received and selected variables: age of the mother; educational level; number of visits made to the antenatal clinic; gestation when she started attending antenatal care clinic and sources of information;
7. To determine if there was a relationship between overall satisfaction of the mother with information received in preparation for labour and birth and selected variables: age of the mother; educational level; number of visits made to the antenatal clinic; gestation when she started attending antenatal care clinic and sources of information.

#### Research Questions

1. What labour and birth information is given to first time mothers in Malawi?
2. What is the level of satisfaction of first time mothers with labour and birth information?
3. What are labour and birth information needs of first time mothers in Malawi?
4. What are the first time mothers' perceptions of informational and emotional support they received during pregnancy, labour and birth?
5. Is there a relationship between total labour and birth information the mother received and overall satisfaction with information?
6. Is there a relationship between the total labour and birth information the mother received and selected variables: age of the mother; educational level; number of visits made to the antenatal clinic; gestation when she started attending antenatal care clinic and sources of information?
7. Is there a relationship between overall satisfaction with information the mother received in preparation for labour and birth and selected variables: age of the



mother; educational level; number of visits made to the antenatal clinic; gestation when she started attending antenatal care clinic and sources of information?

### Operational Definitions

Antenatal/Prenatal period: The period from conception to onset of labour.

Delivery: Giving birth

Labour and birth period: The period from the onset of labour up to the first hour after birth of the baby.

Labour and birth information: The information regarding events and occurrences during the labour and birth period given during pregnancy, labour and birth.

Multigravida: A woman who has been pregnant before.

Multipara: A woman who has given birth before.

Primigravida: A woman who is pregnant for the first time.

Primipara: A woman who has given birth to her first baby.

Satisfaction with information: The degree of congruence between the first time mothers' expectations of information and their perceptions of information actually received.

Traditional Counsellors (Alangizi): The elderly women chosen by a community to counsel different groups of females. These women are involved in giving labour and birth information to first time mothers.

Traditional Birth Attendants: The elderly women who assist women with giving birth in the rural community. They can learn the skill from an old relative or they can just start doing it on their own. They may be or may not be government trained.

Traditional Helpers: A term referring to both traditional counsellors and traditional birth attendants.

### Organisation of Thesis

Chapter Two: discusses literature review and justifies the choice for the conceptual framework.

Chapter Three: describes the methods and measurements used for the study.

Chapter Four: presents quantitative findings.

Chapter Five: presents the qualitative findings.

Chapter Six: integrates quantitative and qualitative findings and discusses them in relation to previous literature and the conceptual framework.

Chapter Seven: presents conclusions, implications and recommendations for future practise, education and research.

## CHAPTER TWO

### Literature Review

This purpose of this chapter is to examine the body of knowledge on childbirth education and discuss the current practice world wide. The literature review includes sections on: childbirth education; childbirth information needs; childbirth expectations; childbirth experiences; childbirth support; satisfaction with maternity care and satisfaction with care and its measurement. In addition, a conceptual framework developed from the literature is presented followed by a summary supporting the current study.

### Childbirth Education

Childbirth is a very stressful time especially for first time parents because it is a time of transition to parenthood. Antenatal classes are believed to prepare mothers and fathers for this transition. This section reviews literature on content covered at childbirth education class sessions, effects of childbirth education classes and attendance of childbirth education classes.

### Content of Childbirth Education Classes

Childbirth education for parents aims at creating opportunities for new parents to share knowledge and experiences and to develop social network in subsequent meetings. Childbirth education in Sweden is the role of the midwife. A qualitative study, using a non-participant observation, grounded theory approach was conducted by Hallgren, Kihlgren & Norberg (1994) to describe the content, modes of working and reaction/interaction of childbirth education provided by midwives in Sweden. Participants were 12 midwives with varying lengths of experience in

teaching antenatal classes. In relation to the content, the findings indicated varying differences regarding depth and extent of content.

Kihlgren & Norberg (1994) further explain that three perspective's were found: obstetric, parent-oriented and mixed perspectives. Themes which were included in classes within these perspectives were the roles of woman and man during labour and delivery, normal progress of labour, divergence from normal progress and ways of handling complications, pain and pain relief, the baby and the goals of the classes. In some circumstances information on exercises, breathing and relaxation techniques was given. In some classes the tasks of the staff during labour and delivery and the parents co-operation with the staff were covered .

In the obstetric perspective, the themes were handled from a medical point of view. Information about obstetric facts and prevailing hospital policy was given. The language used by the midwife was too technical. Information on physical and emotional experiences, how to tell when labour has started, labour pain, arrival at the hospital and the birth of the baby were not mentioned.

In the parent-oriented perspective, the parents wishes and expectations were elicited and these were used by the midwife as a framework for the sessions. Physical and psychological aspects on wanted themes, for example caesarean section, were discussed. Themes such as the normal progress of labour including the birth of the baby and the father's role during birth were treated superficially.

Within the mixed perspective, the midwife also proceeded from the parents' wishes and expectations but when necessary, themes discussed were supplemented with obstetric facts or with physical or psychological experiences. In relation to the mode of working, the midwife acted as the expert. Parents questions were not answered, sharing of experiences was not encouraged and no time for reflection was

given. There was also routinisation with the midwife giving short positive feedback and telling the parents the planned content with the normal progress of labour taken for granted although complications were always mentioned.

Of great concern is the fact that in Malawi, there is no childbirth education classes with predetermined topics as is indicated in the Swedish study. All antenatal mothers in Malawi get information about childbirth when they attend antenatal care clinic but there is no set policy on the content of childbirth information they get. Some of the findings of the Swedish study are important and could be applicable in Malawi. There are however cultural differences such as fathers not being able to participate in childbirth.

Other studies have revealed content of antenatal classes to be generally the same in most settings. Topics include pregnancy, labour and delivery and postnatal care. Topics commonly covered include: how to know that labour is starting, birth defects, natural childbirth, when to go to the hospital, danger signs in pregnancy, why caesarean section is done, anaesthesia in labour (Freda, Anderson, Damus & Merkatz, 1993); voluntary relaxation, breathing patterns to distract attention during contractions, specific massage techniques, suggestions or positions that the mother may wish to try in labour and other physical comfort measures (Maloney, 1985). Childbirth classes also help to impart skills for coping with the stress of labour and for attitude modification (Simkin, 1991).

In summary, there are many issues concerning labour and birth that are covered at childbirth education classes. Review of this literature reveals that these topics are already predetermined and parents receive the information when they attend childbirth education classes.

### Effects of Childbirth Education Classes on Attenders

Since the turn of the century, many studies conducted on antenatal education indicate that childbirth education decreases fears associated with childbirth, decreases maternal anxiety and contributes to positive birth outcomes (Goodman & Abernathy, 1989; Hetherington, 1990; Lumley & Brown, 1993; Petitti, Coleman, Binsacca & Allen 1990).

Lumley and Brown (1993) compared how attenders and non attenders at childbirth education classes differed and how their births differed. A postal survey was carried out on 1193 primiparous women eight weeks after giving birth in Victoria, Australia. The response rate was 71.4%. Of the 292 primiparous women, 245 (83.9%) attended childbirth education classes. Findings indicated that non attenders of childbirth classes were more likely to be under 25 years of age, not to have completed secondary school education, single, with low income, no health insurance and attended public hospital clinics. There were no major differences between the groups with respect to measures of pain and the use of procedures, interventions and pain relief in labour. There were no differences in their satisfaction with information during pregnancy, labour and the postpartum period. A very interesting result showed that attendance at childbirth education preparation classes in Victoria is not associated with differences in birth events, satisfaction with care or emotional well being among women having their first child.

Similarly, a study conducted by Nicholas (1995) of Georgetown University, Washington, in United States of America compared the adjustment to parenthood of two groups of parents. The groups comprised those who attended and did not attend prenatal education classes. Participants in this study included 106 married couples,

58 (55%) who attended prenatal child birth education classes and 48 (45%) who did not.

The correlational results of the study indicated that prenatal childbirth education classes attendance was associated with higher maternal age, greater maternal education, greater paternal education and maternal perception of paternal childbirth involvement in labour and birth. There were no differences between the groups in measures of prenatal attachment, paternal childbirth involvement, childbirth satisfaction, parenting sense of competence and ease of transition to parenthood.

Other studies indicated that mothers who attend prenatal education classes had less labour pain, less need for drugs during labour and fewer operative deliveries compared to those who did not attend (Fiscella, 1995; Hetherington, 1990; Palkovitz, 1987; Rogers & Schiff, 1996; Simkin, 1991, Simkin, 1992).

Perry (1992) challenges the belief that expectant parents who participate in prenatal education courses are more likely than non participants to have positive birth outcomes. Perry (1992) further asserts that preparation for childbirth courses provide opportunity to maximise birth outcomes but must not be considered in isolation. There are other key variables such as genetic factors, values, beliefs, access to resources and availability of support structures which have to be considered. Perry (1992) emphasises the need to view childbirth classes as a complex, interrelated structure of variables that serve to create, influence, modify, support and reinforce those factors considered to be indicators of favourable birth outcomes such as consumer satisfaction, acceptable birth weights, minimal intervention and/or complicated rates.

Although there are studies showing positive effects of childbirth education, there are other studies which indicate problems with childbirth education which can lead to negative impact on first time parents. The problems include lack of continuity of care because usually midwives who give information at childbirth classes are not the ones who take care of the mother during birth (Bryar, 1988); giving conflicting information to parents (Henderson & Brouse 1991; Hillan, 1992) and lack of adequate preparation in some aspects of care such as pain during labour (Fridh & Gaston-Johansson, 1990; Hillan, 1992; Nicholas, 1995).

All the studies which have been discussed relating to effects of antenatal education were conducted in developed countries with different socioeconomic and cultural background. There have been no studies to date from developing countries such as Malawi, therefore a gap in knowledge exists in developing countries.

It is also interesting to note that studies have shown some pregnant teenagers find it difficult to attend childbirth education classes. The results of such studies suggest that young first time mothers do not like attending childbirth education with older women and that these women need to have specialised childbirth education classes (Bachman, 1993; Black, 1986; Copeland, 1979; Mollart, 1995; Nicholas, 1995; Shearman, 1989; Timberlake, Fox, Baisch & Goldenberg, 1987).

The findings of these studies have implications for the current study because first time mothers in Malawi are expected to receive childbirth information at antenatal clinics. The settings of antenatal care in these developed countries where the studies were undertaken are different to developing countries such as Malawi. There are no organised childbirth education classes where both parents can attend. Only the mother attends the antenatal care clinic where topics on various health and pregnancy issues are taught in an ad hoc manner by the midwives. Therefore results



of the reviewed studies may not be easily applicable to a country where antenatal educational practices are done differently. This emphasises the need to explore what is currently happening and to establish the status quo in order to assess its effectiveness and if necessary to consider changing the manner in which mothers get childbirth information in Malawi.

### Childbirth Information Needs

This section addresses what mothers consider to be their childbirth information needs. Childbirth information needs are crucial for preparing parents for labour and birth as well as for influencing their satisfaction with the first childbirth experience (Handler, Raube, Kelly & Giachello, 1996).

Bester and Nolte (1992) conducted a study on knowledge and expectations of childbirth in primigravidae within the context of an academic hospital in Johannesburg. The primigravidae's experience of childbirth was influenced by the knowledge and expectations she had of childbirth and these were based on the information she received from the antenatal clinic, the nursing staff, her mother, friends, and family. The study was exploratory, descriptive, and used a structured questionnaire. The results of the study revealed that respondents felt they had insufficient knowledge of childbirth and coping with pain during labour. The insufficient knowledge was mainly attributed to poor attendance at antenatal clinics, inadequate professional counselling and the mother of the primigravida being the primary source of information. It was concluded that the preparation of primigravidae for childbirth was inadequate. There is lack of detailed information about the rest of this study. Efforts made to ask for further information were not successful therefore there are limitations to critiquing the research.

Similarly, Flessig (1993) conducted a study to explore the views of women regarding information given to them by staff during labour and birth. Twenty registration districts in England and Wales were chosen for the study. Women (N=1996) were sent questionnaires 6 months after birth. Seventy six percent of the mothers responded: of these 22% were primiparae and the remainder were multiparae. The results indicated that 81% of all the mothers felt they had enough information about labour and birth, while 18% wanted more information and 1% gave other answers. The results also revealed that age, parity and marital status were associated with their views about the information given by midwives and doctors during labour and delivery. Primiparae and multiparae under 30 years of age, and the unmarried felt they did not have adequate information. Procedures which influenced the women's views about the amount of information given to them by staff were: whether they experienced an emergency caesarean section, an enema and pain relief measures other than epidural. Women expressed that they wanted more information about how labour was progressing and details about procedures.

The results of Flessig's (1993) study are very interesting as they pose a greater challenge in Malawi because often the midwife-patient ratio in labour is 1:10 while doctor-patient ratio is 1:100. Midwives and the doctors may not always have enough time to explain about labour during labour and the birth period (Malawi National Health Plan 1986-1995). Therefore, the more prepared the mother is during pregnancy, the better because she is not likely to get "quality explanations" during labour in an understaffed labour ward.

Another perspective associated with information needs was examined in a study by Freda, Anderson, Damus and Merkatz (1993) who compared what pregnant women wanted to know and what providers thought was important to be taught.

Participants in the study were 385 clients and 32 nurses and physicians in an inner city community in the north east USA. In the survey, participants were asked to rate their interest in 38 topics. The results, which showed significant differences between clients and their information providers, has major implications for how nurses assess clients' needs for specific childbirth information. The clients reported greatest interests in topics such as fetal development, nutrition, vitamins, travel, bottle feeding and danger signs, when to go to hospital, medicines in labour, how to know when labour starts, effects of stress on pregnancy, rest and activities, discomforts in pregnancy, anaesthesia, natural childbirth, birth defects, bleeding in pregnancy and breast feeding. Providers felt clients would be interested in topics such as use of forceps, breast feeding, family violence and when to go to the hospital. Interestingly, primigravidae expressed interest for all topics while multiparous clients expressed interest in selected topics. It is however important to note that the study did not address the origin of interest or lack of interest. Freda et al. (1993) argued that understanding the relationship between pregnant womens' and providers' perceptions could help prenatal health educators to meet clients' needs better, while responsibly teaching about topics they know are necessary.

Mothers know what they want to know about labour and birth. Other studies revealed what parents have identified to be their childbirth information needs. Parents/mothers want to know the following: explanation and information at all stages during labour and birth (Jacoby, 1988); what happens during labour and birth (Copeland, 1979); anatomy and physiology of reproductive system, normal labour and delivery process, caesarean birth, labour and delivery drugs and their effects; relaxation, breathing techniques (Avery & Olson, 1987); birthing options (O'Callaghan, 1995; Whelan, 1995); a sense of control regarding her care, being

sustained by another human being, receiving bodily care, having pain relief, receiving information and explanation of the labour and birth process, being assured of a safe outcome for the baby and herself, having her personal philosophy and behaviour during labour accepted (McKay & Yager Smith, 1993).

In summary, of great importance to this study is the fact that traditionally the content for childbirth classes is determined by health professionals. Mothers have their own perceptions of the labour and birth information they consider important to know. The mother's perspective of childbirth information needs is very crucial for planning content of childbirth classes particularly in a setting like Malawi.

### Childbirth Expectations

This section addresses the literature on parental childbirth expectations which they develop during pregnancy. With current childbirth education classes, many parents view childbirth with positive expectations. Maternal childbirth expectations play an important role in determining a woman's response to her childbirth experience (Macintyre, 1981; Moore & Hopper, 1995; Bryanton, Frazer-Davey & Sullivan, 1983).

Research studies indicate that meeting patient's expectations requires staying close to the customer (Spitzer, 1988). A study by Green, Kitzinger & Coupland (1990) which explored women's expectations of childbirth among 825 women booked for delivery in six hospitals in south of England, revealed interesting information about women's expectations of childbirth. Green et al. (1990) found that the more years of education a woman had, the more knowledgeable she was about labour and birth and the more confident she was in her approach to childbirth. There was also a strong relationship between a higher level of education and attending

antenatal classes, being informed about the advantages and disadvantages of pain relieving drugs and claiming to be knowledgeable about birth of the placenta. The more years of education, the more emphasis she put on the importance of being well informed about childbirth. Obstretic interventions that women experienced during labour were not related to their level of education. The study also justified the lower expectations of input into decision making of less well educated women. Level of education was however not associated with fulfilment, satisfaction, and emotional well-being except for description of characteristics of the baby. Well educated women were able to describe the characteristics of their baby. The findings of this study bring insight into the impact of level of education on the women's expectations of their childbirth experience and has implications for the manner in which childbirth information is given to women.

Beaton and Gupton (1990) conducted in-depth interviews with a sample of 11 Canadian urban primigravidae. Findings revealed that half of the women reported having mixed feelings about their impending birth experience. These women expressed that they viewed labour as a time of nervous excitement, were anxious and expected to be out of control. They admitted that they did not really know how to imagine the extent of pain or how they expected to cope. The women expected their husbands to be busy, active participants during labour while the nurse was expected to be monitoring labour progress and the doctor was expected to be present during birth. Finally, the women also had expectations about procedures to be done such as shaving, giving an enema, the performance of an episiotomy, use of intravenous infusions and use of analgesics or anaesthetics. The women expected to be consulted about these but they also did not want many procedures. This study has implications for labour and birth information needs and ensuring how maternal expectations can

be met.' These expectations were realistic but problems may occur where expectations are not realistic because the mothers can become frustrated.

Studies by Creedy (1995), Gould (1995), Halloway and Bluff (1994) and Mackay (1990) on women's preparation for childbirth experience found similar results as those of the previous researcher. Mothers have expectations which they develop over time during pregnancy. They do expect to have their expectations met by the end of the childbirth experience and if they are not met, they become frustrated. It was however clear from these studies that women wanted to take an active role in the control of their labour and wanted to well informed about their labour and birth.

Studies show that patients want good communication and education programs that give them appropriate information which will help them to develop realistic expectations (Eriksen, 1987; Friedman, 1986; McIntosh, 1988).

### Childbirth Experiences

This section discusses childbirth experiences based on some previous research studies. Childbirth experiences have great physical, social and emotional effects on parents (Simkin, 1991). Research studies performed world wide indicate that there is a strong relationship between preparation for childbirth and expectations that the parents developed during pregnancy (Driedger, 1993; Kojo-Austin, Malin & Hemminki 1993; Lamprell, 1991; Mackay, 1990; Walker, Hall & Thomas 1995).

A grounded theory approach was used to explore women's birthing experiences in a hospital (n = 5) and home environment (n = 5) in Australia. In depth interviews revealed insights into maternal perceptions, beliefs, values and behaviours in response to the birthing experience. Findings of this study indicate pre-birth

expectations of birthing revolve around three issues: women obtain information; articulate the information and discuss options for turning points during birth and work through previous trauma, dissatisfaction and fears. During birth, women expressed coping with fear in relation to birthing. However, women who had a hospital birth were not given opportunities to work through these fears before or during the actual birth. The provision of information, open discussions of issues and the development of strategies through the midwife-woman relationship enabled some women to focus and use personal resources to confront fears of birthing. Furthermore, several women felt issues of trauma, the experience of pain, consultation and dignity were crucial. Finally, all the women expressed the need to have a debriefing of their birthing experience (Creedy, 1995).

Gould (1995) commenced a pilot study in 1994 which was aimed at exploring women's childbirth experiences and the meanings which are attached to these experiences. Five primiparous women 4-6 months postpartum were being interviewed using a phenomenological approach. Gould (1995) believed that giving women opportunities to tell their experiences gives midwives greater understanding of women's birthing experiences and how these affect them. This information could help midwives to provide adequate childbirth preparation especially to first time women. The results of the main study are not reported since at the time of writing, the author had just completed the pilot study in preparation for the main study. It will be helpful if the results of the main study are published to allow comparison with findings of previous studies.

New evidence from a study in Iceland by Halldorsdottir and Karlottir (1996) supports previous research findings which reveal that giving birth is a powerful experience. Their study's purpose was to explore the essential structure of the lived

experience of childbearing in fourteen mothers in Akureyri and Reykjavik. The study findings indicated that when a woman commenced her journey through labour and birth, her circumstances in life, as well as her expectations, were part of what she carried with her to birthing experience. The woman's experience was influenced by whether she was a primipara or multipara. The influence of expectations included issues such as whether one expected labour to be easy or difficult. A sense of self during the journey was also important. This comprised a woman's sense of being in a private world as well as perception of needs during the journey. These included the need for a sense of control, the need for caring and understanding, and the need for a sense of security. Labour and birth were considered to be the journey itself. The woman's perception of the journey through labour was comprised of her perception of pain and hard work. The perception of birth seemed to vary. Some women in the study felt a relief when they were able to give birth while others felt it was the most difficult time and perhaps felt it was dying time. The final category was the experience after the birth of the baby.

Research studies indicate that positive childbirth experiences are associated with the balance of perceived personal control and perceived support, feeling informed, having choices and making decisions, having options in a supportive environment and having someone to help them feel confident (Price, 1995; Walker, Hall & Thomas, 1995); dealing with expectations of pain and pain relief (Green, 1993); support and communication received during childbirth (Jambunathan & Stewart, 1995); keeping women informed during labour about what to expect thus giving informational support (McKay & Yager Smith, 1993); feeling in control, self confidence and esteem, good memories about doctors and nurses (Simkin, 1991) and knowledge of childbirth, fears regarding pregnancy, locus of control, state of anxiety,



expectation of pain, and confidence in ability to control pain (Crowe & Baeyer, 1989).

In summary, the results of these studies reveal factors that influence a positive childbirth experience. Midwifery in Malawi strives to achieve this goal. The issues in this review are worth considering if first time mothers are to be satisfied with their first child birth experience. It is apparent from these previous studies that giving adequate information is the core to positive childbirth experience and therefore, it is necessary to ensure that mothers are given as much information as they need.

### Childbirth Support

This section addresses the literature on childbirth support. Researchers have reported the impact of social support on mothers experiences of childbirth. Social support has been described as emotional, informational, and instrumental (Dimond & Jones, 1983; Norbeck, Lindsey & Carrieri, 1981). Support from significant others such as a spouse or from professional nursing staff during labour influences a more positive experience of childbirth, shorter duration of labour and a positive attitude towards labour (Beaton & Gupton, 1990; Hodnett & Osborn, 1989; Klaus, Kennel, Robertson & Sosa 1986; Koeske & Koeske, 1990; Pascoe & French, 1990). Hodnett & Osborn (1989) found that women receiving continuous support during labour were less likely to use analgesia, less likely to have episiotomies and exceeded their expectations of personal control during childbirth. Evidence also suggests that support during labour improves women's satisfaction with childbirth experience (Higgins, Murray & Williams, 1994; Jambunathan & Stewart, 1995; McNiven, Hodnett & O'Brien-Pallas, 1992).

Tarkka and Paunonen (1996) report findings of a recent study on social support during childbirth. A total of 200 volunteers were recruited for a study over a period of three weeks from Tampere University Hospital in Finland. The results revealed that family members such as a spouse or partner, parents, siblings, friends and neighbours were the most mentioned support persons to the mother during childbirth. Health professionals, especially the public health nurse at the prenatal clinic came after the informal support network. First time mothers received more support than other mothers. The support by midwives was directly related to a positive and less painful experience of childbirth. The support of significant others was considered important but less than that of health professionals. The results of this study have implications for giving support to mothers by family members and health professionals. Midwives must realise that mothers expect support during their childbirth experience despite the fact that they get a lot of support from their families.

Although many studies have shown the positive outcomes of social support during childbirth, it is disturbing to note that in a recent study by Gagnon and Waghorn (1996) in Montreal, Quebec, they found that labour and birth nurses spent less time giving support to women in labour but spent more time doing paper work. Supportive activities included physical comfort, emotional support, instruction and advocacy. A total of 74.9% of nurses time was spent separated from women. Furthermore, 58.6% of the time was spent on giving/writing reports and 28.6% on preparing equipment or drugs. These findings are of great importance because they reveal a problem in the way mothers were supported if nurses spent less time giving support to them and more time doing things like report writing.

Another perspective of social support relates to social network advice that women receive during pregnancy where giving information about childbirth myths,

misinformation about childbirth and proper counselling occurs. St. Clair and Anderson (1989) conducted a study on 185 low income, inner city women at a large teaching hospital in Baltimore, Maryland, USA. The findings indicated that the individuals who gave advice were: mother, partner, sisters, friends, grandmothers, neighbours, aunts, relatives of the boyfriend/husband, brothers and cousins. The advice covered the following: diet; activity; hygiene; avoidance of potentially harmful substances or practices for dealing with discomforts of pregnancy and information related to pregnancy, labour and birth. Although all women except two received advice from their relatives, they were not necessarily given scientifically sound reasons for the recommendations. Women also received outdated information that if acted upon could endanger their health or that of the baby, for example using Mwanamphepo (traditional herbal mixture with secret ingredients) to enhance labour. The results also revealed that some of the advice women received may have had the potential to cause a great deal of anxiety and worry or come in conflict with recommendations of health care providers. These findings are very interesting because they could be applicable to a country like Malawi where a lot of advice is given to mothers from the family network. First time mothers receive information which may be sound but without scientific reasons including information which is full of myths and beliefs which may then cause a lot of anxiety.

In summary, the literature reveals that support given to the mother during pregnancy, labour and birth is essential for their preparation for labour and birth. Support influences the way the mothers view their childbirth experience. Family members are the main source of support, but the mothers seem to indicate that they wish to receive more support from health professionals particularly midwives. An

element of traditional beliefs or myths can be associated with informational support given to mothers by the family.

### Satisfaction with Childbirth Education

This section discusses literature on satisfaction with care and its measurement. Satisfaction with care has been reported to be one of the predictors of overall satisfaction with hospital care. Studies on satisfaction have mainly addressed factors associated with satisfaction as well as issues to be considered when measuring satisfaction.

### Factors Associated with Satisfaction with Childbirth

Turnball (1984), conducted a survey of women attending an antenatal clinic in Tasmania, Australia, to ascertain their opinions on adequacy of information gained at the antenatal clinic. The degree to which age or parity had influenced their perception was also determined. In addition, the subjects were given opportunity to comment on care they received at the antenatal clinics. Of the 151 respondents, 47.6% were primigravidae. The respondents expressed dissatisfaction with care particularly relating to lack of adequate education and long waiting times. Over three quarters (75.8%) of the respondents indicated that their knowledge about pregnancy had been from family, friends, books and magazines. The mothers' perception of information about pregnancy showed that they were not satisfied with the information given. Most of them were concerned that they were not even given the opportunity to ask questions. Findings of this study are a concern because the issue of getting information from books and magazines is dependent on the literacy level of mothers and on the adequacy of the content. The findings would be applicable to developing countries such as Malawi but use of literature may be questionable as

there is low literacy level among the adult population. This potentially increases the problem of poor preparation as primigravidae in Malawi are more dependent on verbal instruction.

Bramadat and Driedger's (1993) results of a study on satisfaction with childbirth found that there were methodological issues to be considered when measuring satisfaction with childbirth. The first part of the study was quantitative and measured the satisfaction with labour and birth with 91 postpartum women in Manitoba, Canada. In addition, different aspects of the experience were described. In the second part of the study, semi-structured interviews with nine of the women were conducted to determine conceptual issues of women's satisfaction with childbirth. Both studies found support for a discrepancy theory of satisfaction. They found that a major problem in measuring satisfaction was understanding what it meant, because most women had difficulty describing what they meant when they said they were satisfied or not satisfied.

Alexander, Candridge, and Moore (1993) contributed to the knowledge on patient satisfaction with care in their study on satisfaction with maternity services. A convenience sample of 152 subjects was recruited from among mothers who had delivered vaginally at the University of Texas Medical Branch. Three instruments were used to collect data: maternal demographic and background data record; maternity services assessment questionnaire; and patient satisfaction with maternity services instrument. From the findings, the researchers argued that if patient satisfaction was to be used as an indicator of quality care and the need for change in midwifery practice, it was important that data be a true representation of women's perceptions of hospital services. The findings indicated that patient satisfaction was

not influenced by maternal demographic characteristics but by the services being offered.

Central to dissatisfaction reported by women is lack of information and participation in the decision making process. Data on satisfaction with care in labour was collected in a survey conducted in conjunction with a review of maternity services in Victoria, Australia by Lumley and Brown (1994). All women who gave birth in a period of one week in 1989, were mailed questionnaires eight to nine weeks after the birth. The factors that highly related to dissatisfaction with intrapartum care were lack of involvement in decision making, insufficient information, a higher score for obstetric intervention and perception that care givers were not helpful. No association was found between satisfaction and maternal age, marital status, total family income, country of birth or health insurance status (Lumley & Brown, 1994).

Seguin, Therrien, Champagne and Larouche, (1989) conducted a study on 1790 women from Montreal, Canada. Women who had given birth four to seven months prior to data collection were posted a questionnaire. With factor analysis, five dimensions to women's satisfaction with childbirth were identified: the delivery itself; medical/nursing interventions; information received, participation in the decision-making process and physical aspects of the labour and birth rooms. Participation in the decision-making process was the first component of satisfaction with medical care. Information received appeared to be the major component of their satisfaction with nursing care. The physical environment did not affect women's satisfaction with obstetric care.

Other studies have also found similar results. Factors that influenced satisfaction with childbirth include the following: information giving, type of birth, foetal monitoring, pain relief, birthing traditions, feelings of personal control over the

birthing experience, social support (Mercer, 1985; Windor-Richards & Gillies, 1988); parity, institution and social status (Green, Coupland & Kitzinger, 1988); interventions and use of technology (Cartwright, 1987; Green et al. 1990); art of care, technical competence of the care giver, continuity of care giver and atmosphere and physical environment of the setting (Handler, Raube, Kelley & Giachello, 1996).

Findings of other research studies have indicated the timing of measuring satisfaction also appears crucial. Some women may not feel free to criticise the care if they are still in hospital (Lumley, 1988; Shearer, 1993; Sullivan & Beeman 1982). As early as 1978, Locker and Dunt suggested that information about satisfaction should be elicited only when patients feel at liberty to appraise the hospital experience and the care received. These findings therefore, emphasise the need to ensure proper timing during data collection of studies on satisfaction with care.

### Measurement of Satisfaction with Care

Measurement of patient satisfaction with care has become increasingly important as a practical gauge to quantify effectiveness and efficiency of care (Bond & Thomas 1992; Munro, Jacobsen, & Brooten, 1994). La Monica, Obsert, Madea and Wolf (1986) and Everitt (1995) shared the same opinion and argued that determining patient expectations and evaluating patient outcomes, including level of satisfaction was essential in the provision of quality and patient centred care. Patients' satisfaction with care is of considerable concern to health professionals interested in monitoring care quality and studying the effectiveness of specific interventions.

Bond and Thomas (1992) explained that patients' views of their care, summarised as satisfaction, are the most widely used unspecified measure of

outcome. According to these authors, measurement of patients' satisfaction fulfils several distinct functions. These functions involve evaluation of: the quality of care; effectiveness of educational interventions by nurses; effectiveness of an educational intervention for patients; effectiveness of an educational intervention and evaluation of the performance of the nurse practitioner. Bond and Thomas (1992) further point out, that from their previous research studies, there are conceptual issues to be considered when measuring patient satisfaction. These are clarity of definitions and concepts, diversity of patient perceptions and influences.

Studies by Cottrell and Grubbs (1994); Kerssens, (1993); Laitinen (1994 ) have also shown that patient satisfaction with care is an indicator for measuring quality of care. Several variables were found to be associated with patient satisfaction with care and these include: availability of resources; perceived quality care continuity; interpersonal relationships or communication; outcome and expertise of providers. The quality of care is of great concern to government, health professionals and to patients, hence these issues need to be carefully studied.

Finally, another obstacle in measuring satisfaction is client level of education. The ability to understand and/or recall information, and the ability to communicate effectively with health personnel are affected by the level of education (Higgins, Murray, & Williams, 1994). The ability to understand and recall information causes problems in assessing the quality of care given. This concept is in contrast with the results of a study by Green et al. (1990) whose findings did not support this view.

It is however, worth noting that Eriksen (1987) holds yet another contrasting view on patients' satisfaction as an indicator of quality care. Eriksen conducted a study to ascertain if there was a relationship between the quality of nursing care and patient satisfaction with nursing care in Houston, Texas. Measurements of the



quality of nursing care and patient satisfaction with nursing care were taken on 136 randomly selected subjects. The results of this study did not support the hypothesis that there is a high positive and significant relationship between the quality of care and patient satisfaction with care. Reports of dissatisfaction should be carefully investigated because there could be other factors influencing the responses.

In summary, it is apparent from the literature that many studies have been conducted in developed countries on satisfaction with maternity care and variables that influence the mothers' satisfaction level but no studies are available from developing countries such as Malawi. It is important that mothers in Malawi, particularly first time mothers are given an opportunity to rate their satisfaction with the care they receive.

### Conceptual Framework

In general, the purpose of this study was to determine labour and birth information given to first time mothers in Malawi in preparation for childbirth and to determine their satisfaction with that information. In addition, it was to examine the possible existing relationships between selected variables in the conceptual framework.

The conceptual framework guiding this study was developed from the literature review. Research studies on childbirth education which have been conducted world wide revealed that this is an important aspect of childbirth care given to first time parents in preparation for their first childbirth experience (Gardner, Cliver, McNeal & Goldenburg, 1996; Hallgren et al., 1994; Lumley & Brown, 1993; Nicholas, 1995). Parents/mothers have their own perceptions of the labour and birth information they believe they need. Some of these needs differ from what information providers consider to be important for the mothers to know (Bester &

Nolte, 1992; Jacoby; 1988; Freda et al, 1993). Other studies conducted on childbirth expectations indicate that parents have expectations which they develop during pregnancy regarding their childbirth experience which are determined by different factors (Beaton & Gupton, 1990; Green et al, 1990; Spitzer, 1988). Childbirth experiences are influenced by childbirth expectations that the parents/mothers develop. These experiences have a long lasting influence on the mothers throughout life (Crowe & Baeyer, 1989; Flessig, 1993; Halldorsdottir & Karlsdottir, 1996; McKay, 1992; Simkin, 1991; Walker, 1995). Informational and emotional child birth support is an important aspect of childbirth care given to mothers. The providers of the childbirth support include family and health professionals but research indicates that mothers are sometimes dissatisfied with the support they receive (Gagnon & Waghorn, 1996; Hodnett & Osbor, 1989; Jambunathan & Stewart, 1995; McNiven et al, 1992; St. Clair, 1989). Finally, satisfaction with maternity care is essential for evaluating the efficiency and effectiveness of care (Alexander et al. 1993; Bond & Thomas, 1992; Higgins et al., 1994; Lumley & Brown, 1994; Waldenstrom & Nilsson, 1993).

The studies that have been reviewed have been carried out in developed countries. No studies of this nature have been done in developing countries such as Malawi. Furthermore, in certain cases, it is difficult to apply the findings of these studies because of diverse cultural, economic and social differences. This study will fill the gap in knowledge that exists for developing countries such as Malawi.

The conceptual framework developed from the reviewed literature presents five main constructs which were examined: mother's profile; labour and birth information given to first time mothers; perceived labour and birth information needs; perceived support and level of satisfaction with information (Figure 1).

The construct of 'mother's profile' provided the characteristics of the mothers who took part in the study. The concepts underlying this construct were: age of the mother; nationality; ethnicity; marital status; occupation; residency; religion and educational level. This information was necessary for describing the profile of a first time mother in Malawi. This provided the basis for the explanation of the behaviour of the first time mother in question.

The concepts underlying the construct 'labour and birth information received' were: what labour and birth information first time mothers received; who gave them the information in terms of whether it was a relative, midwife or traditional counsellor/traditional birth attendant; when they received the information meaning the time they started antenatal care in terms of gestation of pregnancy; where they received the information in terms of whether they received information at home, antenatal clinic or place of birth.

The concepts underlying the construct 'perceived labour and birth information needs' included what labour and birth information first time mothers would have liked to receive and suggestions they had for improving current methods of giving information to first time mothers particularly by midwives.

The concept underlying the construct 'childbirth support' was first time mothers' perception of emotional and informational support given by family, traditional counsellors/traditional birth attendants and midwives during pregnancy, labour and birth. Finally, the concepts underlying the construct 'level of satisfaction' were the level of maternal satisfaction with the specific labour and birth information received and overall satisfaction with information received.

The conceptual framework's model is illustrated in Figure 1. In the figure the five constructs and their concepts have been presented. The solid lines represent

findings of research carried out in developed countries world wide while the dotted line arrows illustrates the fact that no studies had been done in the country under discussion therefore justifying the need for this study. The study was able to describe the current status quo of the constructs as well as relationships between each of the following concepts: total labour and birth information received; overall satisfaction with information; age; educational level; antenatal clinic attendance; source of information and place of birthing. However, it is important to note that the study of relationships between all the other concepts which have not been mentioned was beyond the scope of this study.

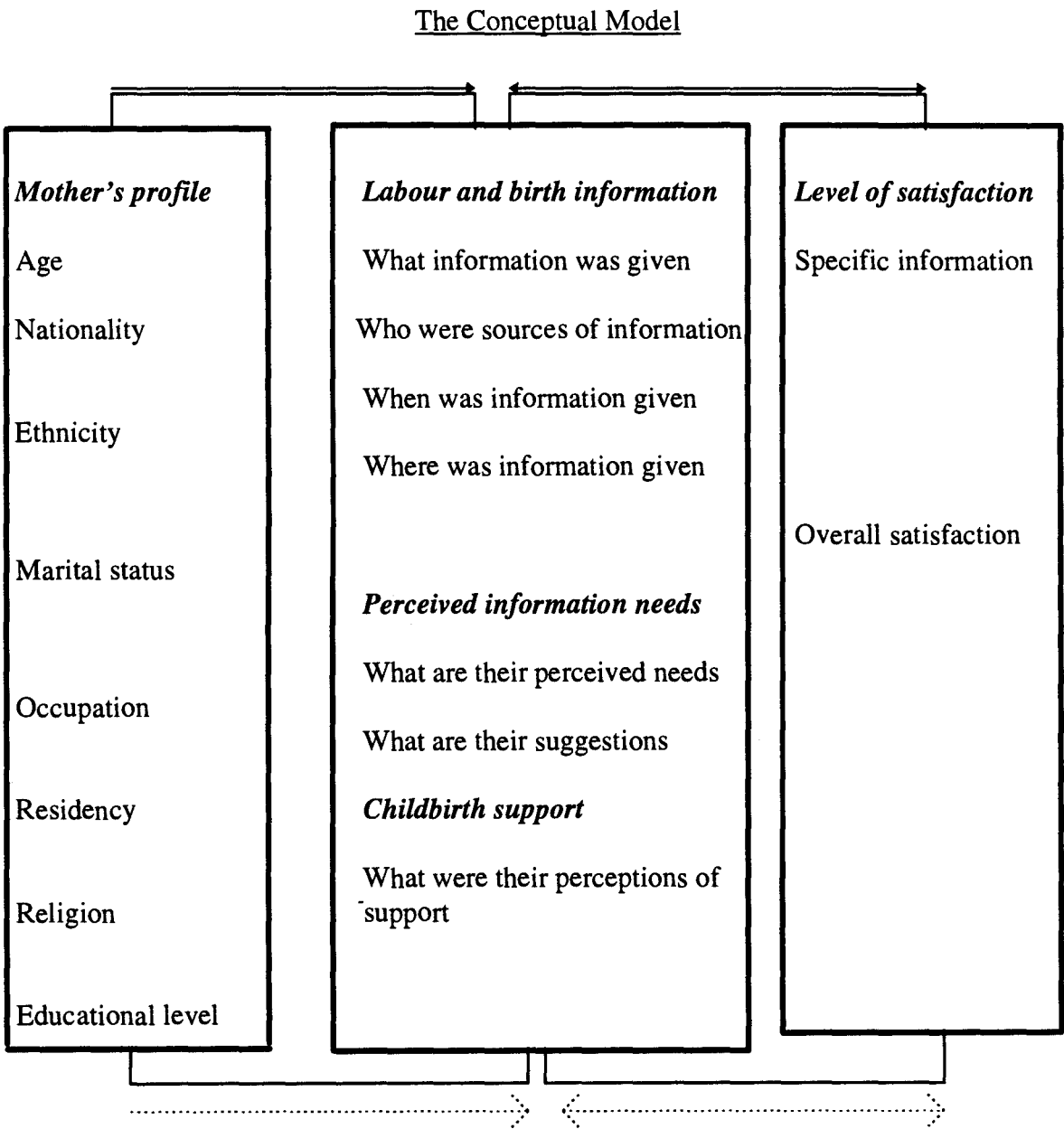


Figure 1. Conceptual Model Underpinning the Study

Key:

- > indicates that studies have been done on impact of construct
- > indicates that studies have not been done in Malawi on impact of construct
- ←———— indicates relationships demonstrated in previous studies
- ←----- indicates unsupported relationships in Malawi

### Summary and Implications for Present Study

In summarising the existing literature, several interesting issues have emerged. Firstly, the majority of the literature reveal that childbirth educational classes which are aimed at preparing parents for their childbirth experience are carried out in many countries world wide. The impact of these classes have been found to be helpful to most first time mothers. Literature also indicates a wide range of research done on childbirth experiences and expectations. It is apparent that childbirth expectations are developed during pregnancy or before and that parents do anticipate that these expectations be met. Failure to meet these expectations leads to dissatisfaction with care. Mothers are able to remember their experiences and usually these have a long lasting impact on their life. Finally, literature suggests that patient satisfaction with care is one of the indicators of quality of care and that mothers' experiences of childbirth have been used to assess their satisfaction with childbirth care received

From the literature review it is clear that the many studies performed on these issues have been conducted in developed countries and there is insufficient information from developing countries such as Malawi. It is important to conduct research studies on childbirth in developing countries because many issues are different such as literacy level, access to health care and availability of human and material resources in the health care system. The implications for the study centred on the lack of knowledge on labour and birth information needs and satisfaction with information among in first time mothers in developing countries such as Malawi. This study addressed the gap in the body of knowledge.

## CHAPTER THREE

### Methodology

The purpose of this chapter is to describe the methods and procedures used to conduct this research study. The chapter commences with a description of the research design, followed by an outline of the setting, sample and development of the instrument with reliability as well as validity measures undertaken. The procedure followed in data collection will be presented followed by data analysis and finally, ethical considerations will be presented.

### Design

A descriptive-correlational survey design was used to meet the study's objectives. Data was collected at one point in time among first time mothers within eight weeks following the birth of their first child. Participants were asked to recall events from their pregnancy, labour and birth relating to the information they received. Qualitative and quantitative type of questions were used to capture the full nature and meaning of their experiences regarding labour and birth information. Using both paradigms was necessary to obtain a greater richness in the depth of the data. The qualitative aspect of the methodology fits in the interpretative paradigm, the aim of which in this study was to describe and interpret the meaning of the mothers experiences regarding labour and birth information giving based on their experiences. The quantitative aspect of the methodology belongs to the logical positivism paradigm, the aim of which in this study was to bring objective facts from the mothers experiences of labour and birth (Morse, 1991).

### Setting

The study was conducted in both private and public hospital settings in Blantyre, Mulanje and Ntcheu districts in southern and central regions of Malawi. The following hospitals were used: Queen Elizabeth Central Hospital; Mulambe Mission Hospital; Mulanje Mission Hospital; Mulanje District Hospital and Ntcheu District Hospital. Different types of hospitals were chosen with consideration of size and the governing institutions to ensure that there was representation from both large and small hospitals as well as government and private sponsored hospitals.

#### Queen Elizabeth Central Hospital

Queen Elizabeth Central Hospital is a referral hospital situated in the City of Blantyre which is Malawi's major commercial city (Figure 2). This is a public hospital operated by the Government and provides free medical services. It caters for ten district hospitals which are smaller hospitals situated in smaller towns surrounding Blantyre. Queen Elizabeth Central Hospital has a patient bed capacity of 1,000, half of these beds are in the maternity unit.

#### Mulanje Mission Hospital

Mulanje Mission Hospital is situated 160 kilometres to the south of Malawi on the border with Mozambique (Figure 2). It is a private hospital run by the Church of Central African Presbytery. It is mainly a maternity hospital and has a patient bed capacity of 400. This hospital caters for patients from the neighbouring Mozambique, districts such as Thyolo, Chiradzulu, Chikwawa and within Mulanje district itself. Although Mulanje has just opened a new Government sponsored hospital which offers free medical services and has a 100 maternity bed capacity, this mission hospital is still a very popular maternity hospital.



### Mulanje District Hospital

Mulanje District Hospital is a public hospital and is operated by the government and is situated 165 kilometres from Blantyre City. This hospital caters for patients from the neighbouring Mozambique, neighbouring districts such as Thyolo, Chiradzulu and Chikwawa and within Mulanje district itself. Although the majority of mothers prefer to use the Mulanje Mission Hospital, others still use this hospital. It has a bed capacity of 500 beds with 100 maternity beds.

### Mulambe Mission Hospital

Mulambe Mission Hospital is a private hospital run by the Catholic Church. It is situated twenty kilometres away from Blantyre city. The patient bed capacity is 500 with 200 maternity beds. This hospital caters for patients from some districts in the Southern region of Malawi such as Chiradzulu, Chikwawa, Mwanza and Blantyre City.

### Ntcheu District Hospital

Ntcheu District Hospital is in the central region of Malawi and is situated approximately 200 kilometres from Lilongwe city (Figure 2). It is a government hospital with 600 beds of which 100 are maternity beds. It caters for people from some parts of Mwanza, Mangochi, Machinga and Dedza districts because of its proximity to these districts.

Maternity units in the settings. In all the hospitals, the maternity units comprise the following four sections: antenatal, labour and delivery, postnatal and child spacing (family planning). In this study, subjects were selected from the postnatal wards, postnatal clinics, under five clinics and child spacing clinics. These sections were chosen because this is where the first time mothers who had given birth without any complications were readily available or accessible.

# Malawi

ADMINISTRATIVE REGIONS AND DISTRICTS

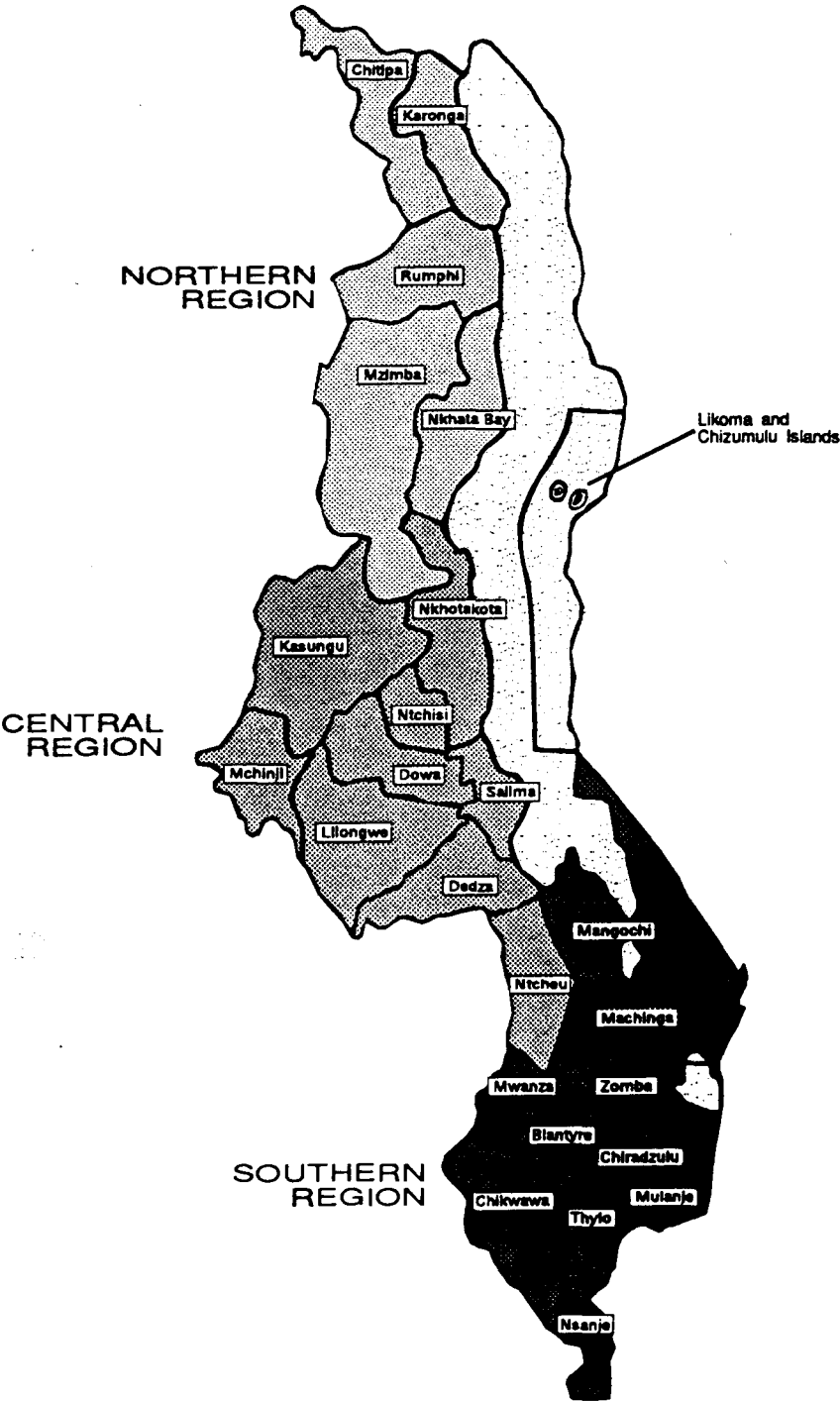


Figure 2: Map of Malawi showing the study sites

### Sample

The target population for this study were primiparae because they had recently been through their first labour and birth experience. A total of 150 primiparae within eight weeks after giving birth were identified and interviewed for this study. All first time mothers had given birth vaginally to a live full term baby. The eight weeks postpartum period was considered a reasonable period within which information received during the antenatal, labour and birth periods could be remembered, easily assessed by the mothers as to whether it met their needs and prepared them satisfactorily for their first labour and birth experience.

Selection of interviews was done using convenience sampling and exclusion of other mothers was performed on the basis of predefined exclusionary criteria. Predefined exclusionary criteria included: multiparity, caesarean birth, a neonatal death, stillbirth or ill health of the mother and baby. The mothers were approached as they were identified in the ward or clinic as potential candidates.

A total of 157 mothers who had given birth to a live full term infant were invited to participate in the study and accepted to be interviewed. However, five of them did not meet the criteria for inclusion. The mothers initially gave ~~untrue~~ information such as that this was a first baby because they wanted to participate in the study. This was discovered during the interviews therefore their data was excluded. Two mothers withdrew before data collection commenced for their own reasons. No other participant withdrew during the course of data collection. A total of 150 first time mothers participated in the study representing a response rate of 95.5%. The sample distribution was as follows: Queen Elizabeth - 50; Mulambe Mission - 20; Mulanje Mission - 30; Mulanje Government - 20 and Ntcheu - 30 mothers.

### Development of Instrument

A survey instrument as shown in Appendix C was developed to explore labour and birth information needs; satisfaction with information that primigravidae receive in Malawi; their perception of labour and birth information needs; and the emotional and informational support received. The instrument was developed using knowledge obtained from the literature and the researcher's experience as a midwife. The instrument has four sections.

#### Section A

The first section addressed amount of labour and birth information that was given to first time mothers and their satisfaction with labour and birth information they received. This section had three open ended questions. The first two questions (a & b) explored labour and birth information which was given at any hospital and at home during pregnancy, labour and birth. The third question (c) in this section explored information the first time mothers felt they should have been given after going through their first labour and birth experience. This was followed by a closed ended question (d) which was also explored labour information that was given and the level of satisfaction with that information. There were twenty items in this question developed from the literature and my personal experience as a midwife. There were four response categories amount of labour and birth information: No Information (value = 1); Some Information (value = 2); More Information (value = 3) and A lot of Information (value = 4). The level of satisfaction also had four response categories: Extremely Dissatisfied (value = 1); Dissatisfied (value = 2); Satisfied (value = 3) and Extremely Satisfied (value = 4). These four response categories were later recorded during data entry to have low scores as "negative" and high score as

“positive.” The mothers who responded that they had received information in the first part of the question were then asked how satisfied they were with the amount of information they received. Consequently those who were not given any information were not asked about their satisfaction with the amount of information.

### Section B

This section addressed the mothers’ perception of the informational and emotional labour and birth support they received during labour and birth. These items were developed with reference to the satisfaction scale developed by La-monica and Obsert and revised by Munro, Jacobsen and Brooten (1994). Items were developed similar to the items on the La-monica and Obsert Patient Satisfaction Scale. Permission was sought from Munro et al. and was granted (Appendix D). There were four response categories in this section: Strongly Agree (value = 1); Agree (value = 2); Disagree (value = 3) and Strongly Disagree (value = 4).

### Section C

The third section firstly addressed overall satisfaction with all the labour and birth information in preparing first time mothers for labour and birth. There were response categories with ratings 1 - 4, ranging from ‘Very Dissatisfied’ to ‘Very Satisfied’. Secondly, an open ended question was asked to explore any suggestions that the mothers may have had in regards to ways of improving the current methods of giving labour and birth information. Finally, this section addressed labour and birth information sources. Options presented were professional, family and traditional sources and mothers responded to a rating scale with four response categories ranging from ‘None’ to ‘A lot of Information’.

## Section D

The final section surveyed demographic characteristics of the interviewees, antenatal clinic attendance and place of birthing. This information was asked at the end of the interview because it was discovered during the pilot study that interviewees felt more comfortable to give their personal information at the end of the interview rather than at the beginning.

### Validity and Reliability of the Instrument

As the instrument was going to be used for the first time there was need to check that the instrument was going to measure the attributes it was intended to measure. There was also a need to check the degree to which it was consistent in its measurement (Polit & Hungler, 1995). Furthermore, the suitability of the instrument as a data collection tool in a Malawian setting had to be checked.

Content validity. Several steps were taken to check the content validity of the instrument. The instrument was given to midwifery expert groups for their critique and assessment of the content using the protocol suggested by Lynn (1986). The “judgement - quantification” stage of Lynn’s procedure to determine content validity of a research tool entails “the assertion by a specific number of experts that the items are content valid, and that the entire instrument is valid” (p.383).

Overall, sixteen midwifery experts were asked to rate each item on the instrument from a choice of four responses: Not Relevant (value = 1); Unable to Assess Relevance Without Item Revision (value = 2); Relevant but Needs Minor Alteration (value = 3) and Very Relevant and Succinct (value = 4) (Appendix E). The experts were also asked to identify areas of omission. The instrument was

assessed four times by different groups of experts and content validity was established at each point and modifications were made where necessary.

Firstly, it was given to three faculty members at Edith Cowan University, Western Australia and five Master of Nursing students who were State Registered Midwives from Botswana, Malawi and Zambia currently studying at the same institution. Following this review, 50% of the items had a coefficient of 1.00, 20% of the items had a coefficient of .80 and no modifications were done to these items. Ten percent of the items had a coefficient of .60 and they were revised and retained while another 10% had a coefficient of .40 and they were eliminated. The comments mainly focussed on using language that would easily be understood by the mothers. Amendments were done as recommended.

Secondly, the instrument was sent to five midwifery lecturers at Kamuzu College of Nursing in Malawi. The majority (80%) of the items had a coefficient of 1.00, 10% had a coefficient of .80 and no modifications were done to these items. Five percent of the items had a coefficient of .60 and items were revised and retained while another 5% were .40 and these items were removed. These midwives mainly looked at the content with respect to it being translated into the mothers language without losing the substance of the questions.

Thirdly, midwives at Kalgoorlie Regional Hospital, Western Australia further looked at the instrument and at this point, 85% of the items had a coefficient of .80, 15% had a coefficient of .60 therefore modifications were done and items were retained. These midwives did not have many comments because the instrument had already undergone a lot of changes following previous reviews however further minor changes were done to incorporate their views. Finally, a senior midwifery



tutor at King Edward Memorial Hospital in Western Australia did a final review of the instrument before it was translated in Chichewa language.

The main areas of changes included inclusion of open ended questions: “What labour and birth information were you given during pregnancy, labour and birth?” and “Tell me any other labour and birth information you would have liked to know?” in section A. Wording of words such as: “Onset of labour was replaced by “How to know that labour is starting”; “Physiological changes...” was replaced by “Physical changes...; “Possible complications...” was replaced by “What could go wrong...” and “Characteristics of the newborn baby” was replaced by “How the newborn baby looks”. Following the modification of the whole instrument the content validity was established with a coefficient of 0.98 using Lynn’s (1986) table on content validity.

After checking expert content validity the instrument was translated into Chichewa language. The translated version of the instrument was reviewed by four Malawian midwives to check if appropriate language was used and to check accuracy of the translation in relation to the English version of the questionnaire. Amendments were done to the Chichewa version of the instrument based on the suggestions given by these midwives.

**Interrater reliability.** To check the degree of consistency of the instrument (Polit & Hungler, 1995), interrater reliability was checked during the training session of research assistants whereby the two research assistants conducted interviews with the same subjects and agreement of interpretation was determined by calculating a reliability coefficient which was .90. This was acceptable because it was planned that at least a minimum of 80% agreement should be achieved. It was necessary to

establish interrater reliability among the researcher assistants to ensure consistency during actual data collection.

Cronbach's alpha reliability analysis. Cronbach's alpha reliability coefficient analysis is one of the reliability measurements which can be performed on instruments. This is based on the responses of the total number of subjects who responded to the instrument. In this study, Cronbach's alpha was calculated on the different parts of the instrument except for the demographic section (N=150). Sub-section (d) of Section A, which measured the amount of labour and birth information had a reliability coefficient alpha of .78 (standardised alpha was .77). Section B of the instrument which measured emotional and informational support had correlation coefficient alpha of .90 (standardised alpha of .90). Sub-section (c) of Section C of the instrument which measured sources of information had coefficient alpha of .60 (standardised alpha of .59). The results indicated that Sub section (c) in Section A and Section B were very reliable because they had correlation coefficients of close to 1. Although Sub-section (c) in Section C was reliable, the correlation coefficients was lower than .7. This may have occurred because there were items with very low correlation coefficients. Eliminating the items with lower correlation coefficients in this sub-section could have improved the overall correlation coefficient. This may have to be considered if the instrument is used in a replicated study.

### Procedure

#### Research Team

Following approval by the Edith Cowan University Higher Degrees and Ethical Committees as well as the National Research Committee in Malawi, two research assistants with midwifery background were recruited. Both assistants were

post diploma Bachelor of Nursing students. They were chosen on the basis of their long clinical midwifery experience and knowledge of research. A one day training course was conducted with them. The training covered the following areas: introduction to the background and purpose of the study, method of data collection and administration of the instrument as well as use of Chichewa language during interview sessions. Interviewing and recording technique were discussed. The training programme included establishment of trust with subjects to elicit full disclosure, importance of accuracy in interpretation of subject responses and how to record the responses as well as techniques for not influencing subjects' responses. A practical session was conducted to ensure that the researchers had a clear understanding of the issues covered during the classroom training sessions. During this practical session each research assistant interviewed two subjects and interrater reliability was also checked.

### Pilot Study

The purpose of the pilot study was to test the questionnaire for its feasibility, reliability and validity. Ten mothers in the postnatal ward at Mulambe Mission Hospital were invited to participate and they accepted to do so. Their criteria for exclusion and inclusion were: primiparity within eight weeks following birth of a normal first child. Exclusion criteria were: multiparity; caesarean birth, still birth, neonatal birth and ill health of the mother or baby. Interviews were conducted in private rooms where physical assessments for post partum women are performed. The interviews were performed when the rooms were not in use. When these rooms were not available other rooms were made available for use. The Sister in-charge was asked to communicate to her members of staff to avoid entering the rooms

during the interviewing sessions and this was adhered to. All these measures were taken to ensure privacy during interview sessions.

Each mother was greeted as she entered the room. She was asked a few questions about how she and the baby were doing. This was done to establish rapport. The purpose of the study and its possible implications for midwifery practise were communicated to each mother and they were asked to sign the consent form if they accepted to take part in the study. The questions were read to the mothers and responses written down on their behalf. Five mothers were asked demographic data first while the other five were asked the main questions first and finished with the demographic data.

Following the pilot study, it was discovered that at least 30 - 45 minutes would be required for each interview because the mothers were allowed to bring the baby with them and had to attend to the baby sometimes requiring an extension to the time of the interview. Data collected also revealed the responses to the question "What labour and birth information were you given during pregnancy, labour and birth?" were mixed between cultural information given at home and other information given at the hospital. In fact four mothers asked for clarification of the question in terms of which information was being referred to: "...the information given at home or at the hospital?" As a result of this the first open ended question was split in two: "What labour and birth information were you given at the hospital during pregnancy, labour and birth? This was followed by "What labour and birth information were you given at home during pregnancy, labour and birth." Finally, it was also clear from the pilot study findings that most mothers felt free to respond to demographic data questions at the end of the interview rather than at the beginning.

It was therefore decided that during the main study, mothers would be asked demographic data at the end of the interview.

### Recruitment of Participants for Main Study

The potential subjects were identified in the normal postnatal ward, one week postnatal clinics, six week postnatal clinics, under-five clinics and child spacing clinics. Communication with the clinics and ward staff about the dates of data collection was ensured before hand and to ensure that data collection did not interfere with other programmes. Upon arrival at the site the midwives concerned were briefed about the study and the role they would be asked to play. The key role of the midwives was to ensure that identified mothers were shown the rooms for the interviews as the interviews were done in private rooms which in some instances were not commonly used and the mothers would not know them. The staff working at the clinics were asked not to interrupt during interview sessions.

All potential participants were identified by the Sister in-Charge and handed over to the researcher who further screened them to ensure that they met the criteria for inclusion in the study. Those who were selected were given verbal information about the study and were asked if they were willing to participate in the study. Those who accepted were then interviewed by the researcher and the research assistants after signing the consent form which was read and explained in Chichewa language. Right hand thumb prints were used for participants who could not write at all.

### Administration of Instrument

Due to the fact that 90% of the rural population is illiterate, the questionnaire was administered by reading the items to the subjects and filling in the responses as they are given. This proved to be successful and no difficulties were experienced.

The researcher and her assistants read back what they had written at the end of the interview session for each mother so that the mothers could verify that the interpretation was correct.

### Data Analysis

Quantitative data were analysed using univariate and Multivariate statistics. Data were entered and analysed using Statistical Package for Social Sciences (SPSS for Windows, Release 6.0.1). Data recording, screening, and categorising were done before data analysis. Identification and elimination of Univariate and Multivariate outliers was also done as recommended by Coakes and Steed (1996). An alpha level of 0.05 significance was set for use throughout data analysis and exact  $p$  and  $r$  values have been presented. Descriptive results are presented as descriptive summaries and tables. The relationships between variables were analysed using Pearson Product-moment correctional analysis. Results are presented in correlation matrices and scatter plots. A Post-hoc factor analysis was performed to summarise the structure of a set of variables on the instrument which measured the amount of labour and birth information the mothers received with the aim of establishing construct validity. Results are presented in tables and a scree plot.

Qualitative data was analysed using content analysis. Content analysis is an analysis that provides systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena (Downe-Wamboldt, 1992). Steps followed during content analysis in this study will be outlined. Firstly, designing the sampling method and selecting the unit of analysis was performed. This was done during preparation for the study. The method for sampling participants was predetermined using the inclusionary and exclusionary

criteria. During interviews open ended questions were asked first before asking closed ended question to prevent influencing the participants responses. The mothers' responses were recorded as they answered each question. Field notes were also taken if the mother was more articulate. Secondly, creating and defining categories was carried out by reading through the mothers responses. Multiple responses given by the mothers to the questions were read through several times to identify significant statements. Meanings of the statements were clustered into categories. The coding of all the data was performed. Findings were presented in tables according to identified themes. Extracts from the mothers who were more articulate were also reported (Downe-Wamboldt, 1992; Morse, 1991).

Issues of reliability and validity in content analysis are of great concern. Stability and agreement was ensured by checking interrater reliability among the researcher and research assistants as has been explained (Downe-Wamboldt, 1992). The established method of returning the findings from qualitative analysis to participants was not done for the following reasons. First and foremost the analysis was conducted in Australia and it was not possible for the researcher to return to Malawi to verify the identified themes with the participants. Even if the researcher had returned, the verification would have been difficult as the vast majority of participants were illiterate and not be able to verify written material. Furthermore, the feasibility of locating participants in their villages would have been impractical.

### Ethical Consideration

In order to ensure that subjects were protected, the researcher sought permission at national, institutional and participant levels after approval by Ethics Committee of Edith Cowan University (Appendix F). At the national level, a letter was sent to the Chairman of the Technical Committee on Research in Malawi, informing him about the study, its purpose and implications (Appendix G). Approval was granted and the suggestions made were considered (Appendix H).

At the institutional level, permission was sought from the administration of the pilot study hospital and other four hospitals. The letters included information about the purpose of study and as well as its implications. Proposed dates for data collection were given and type of subjects to be included in the study. They were assured that anonymity of the names of the subjects would be ensured at all times (Appendix I and Appendix J). Permission was granted by telephone.

The subjects were also informed about the study, its purpose and midwifery implications. The participants were informed that their participation in the study would be voluntary and they were assured that anonymity would be maintained. Those who wished to participate in study were asked to sign a consent form which had a duplicate. One copy was kept by the researcher while the other copy was given to the subject (Appendix K). For subjects under 19 years, their mothers or female relatives signed a separate consent form (Appendix L). Only the researcher and the supervisors had access to raw data, and computer discs. These are kept in a locked filing cabinet and will be destroyed after five years by shredding.



## CHAPTER FOUR

### Quantitative Results

The objectives of this study were sevenfold. First, it was to describe labour and birth information received by primiparae in some districts in Malawi. Second, it was to describe labour and birth needs of primigravidae as identified by primiparae in Malawi. Third, it was to describe satisfaction level of the participants' with labour and birth information they received during pregnancy and labour. Fourth, it was to describe primiparae's perceptions of informational and emotional support received during pregnancy, labour and birth. Fifth, it was to determine if there was a relationship between total labour and birth information and overall satisfaction with labour and birth information primiparae in Malawi received. Sixth, it was to determine if there was a relationship between labour and birth information primiparae received and specific variables: age of the mother; educational level of the mother; number of antenatal visits made to the antenatal clinic; gestation of pregnancy when antenatal clinic attendance commenced and sources of labour and birth information. Finally, it was to determine if there was a relationship between overall satisfaction with the information she received and specific variables: age of the mother; educational level of the mother; number of antenatal visits made to the antenatal clinic; gestation of pregnancy when antenatal clinic attendance commenced and sources of labour and birth information. The design included both qualitative and quantitative components to capture all aspects of the data as completely as possible.

Qualitative results are presented in Chapter Five. Chapter Four presents the findings of the quantitative component in eight main sections: demographic information; labour and birth information received by primiparae; satisfaction with

information; informational and emotional support and sources of information. Correlations between the following variables will be presented: total labour and birth information; overall satisfaction with information; age of the mother; educational level of the mother; number of antenatal visits made to the antenatal clinic; gestation of pregnancy when antenatal clinic attendance commenced and sources of labour and birth information she received. Finally, post-hoc factor analysis of the instrument which measured the amount of labour information will be presented.

A total of 157 first time mothers who had given birth to a live full term infant were invited to participate in the study. Five mothers did not meet the criteria for inclusion in the study, which was primiparity within eight weeks following a normal birth of a live baby, while two decided not to participate because of their own reasons. No participant withdrew during the course of data collection. The final number of respondents included for data analysis was 150 representing a response rate of 95.5%. All findings have been rounded off to one decimal point.

### Demographic Information

The demographic data for all the participants are presented in the same order as the questionnaire. Personal characteristics are presented first followed by details of antenatal clinic attendance and the place of birthing.

#### Age and Nationality

The age of the mothers ranged from 13 to 30 years with a mean age of 19 years (SD = 2.9). The age of the babies whose mothers took part in the study ranged from one to eight weeks with a mode of six weeks and mean of four weeks (SD = 1.9). The majority of the mothers who took part in the study were Malawians (n=147). The remainder were Mozambiqueans (n=3).

Ethnic Group

The majority of the mothers belonged to the Lomwe tribe. The smallest group belonged to the Sena tribe. Details of the ethnic background can be found in Table 1.

Table 1

Ethnic Background

Ethnic Group	Number ( <u>n</u> )	Percentage ( <u>%</u> )
Lomwe	50	33.3
Chewa	31	20.7
Ngoni	30	20.0
Yao	24	16.0
Tumbuka	9	6.0
Sena	6	4.0
Total	150	100

Marital Status

The majority of the mothers (76.0%) were married. The remaining were single, engaged, divorced or widowed. The details have been presented in Table 2.

Table 2

Marital Status

Marital Status	<u>n</u>	<u>%</u>
Married	114	76.0
Single	31	20.7
Engaged	2	1.3
Divorced	2	1.3
Widowed	1	0.7
Total	150	100

Residency

Almost half of the mothers (44.7%) resided with their husbands. Table 3 details the mothers' residency.

Table 3

Residency

Residency	<u>n</u>	<u>%</u>
Husband	67	44.7
Both parents	45	30.0
Her mother	26	17.3
Grand parents	11	7.3
Alone	1	0.7
Total	150	100

Although, 76.0% of the mothers were married (Table 2), only 44.7% were residing with their husbands (Table 3). The remainder were residing with either their parents or other relatives. Usually this occurs because the husband may be working in another area such as in a town or farm and estate and would just come home once in a while to see his wife.

### Religion

All the mothers who were interviewed had a religious affiliation with a majority (92.6%) being Christian. The details of religious affiliation have been presented in Table 4.

Table 4

### Religion

Religion	<u>n</u>	<u>%</u>
Presbyterian	51	34.0
Roman Catholic	47	31.3
Pentecostal	39	26.0
Islam	11	7.4
Seventh Day Adventist	2	1.3
Total	150	100

Educational Level

The highest level of education that the majority of the mothers (74.0%) achieved was lower primary school education. A very small group (1.3%) achieved tertiary education. Details of educational level of the mothers are presented in Table 5.

Table 5

Educational Level

Educational level	<u>n</u>	<u>%</u>
Lower Primary School	111	74.0
Never went to School	19	12.7
Upper Primary School	9	6.0
Secondary School	9	6.0
Tertiary Education	2	1.3
Total	150	100

Occupation

Participants in the sample had a wide range of occupations, however, the majority (62.0%) were housewives who were involved in subsistence farming. Details of occupation are presented in Table 6.

Table 6

Occupation

Occupation	<u>n</u>	<u>%</u>
Housewife/subsistence farming	93	62.0
Commercial farming	24	16.0
Business	14	9.3
Domestic work	6	4.0
Office cleaning	5	3.3
Nurse aid	4	2.7
Primary school teacher	3	2.0
Office manager	1	0.7
Total	150	100

Antenatal Clinic Attendance

The largest group of mothers (93.8%) attended an antenatal care clinic at a hospital. A small number (6.1%) attended antenatal care clinic at a Traditional Birth Attendant's Clinic (TBA). Three participants (2.0%) did not attend antenatal care clinic at any point during pregnancy (Table 7).

Table 7

Antenatal Clinic Attendance

Antenatal clinic	<u>n</u>	<u>%</u>
Central hospital	79	52.7
District hospital	30	20.0
Mission hospital	29	19.3
Traditional birth attendant	9	6.0
Did not attend	3	2.0
Total	150	100

The majority of the participants (77.4%) attended antenatal care clinics three to four times over the course of their pregnancy. Much smaller numbers attended one to two times (10.7%) and five to six times (9.4%). Details are presented in Table 8.

Table 8

Number of Antenatal Visits

Visits made	<u>n</u>	<u>%</u>
1-2 times	16	10.7
3-4 times	116	77.4
5-6 times	14	9.4
>7 times	1	0.7
Did not attend	3	2.0
Total	150	100



The majority of the participants (68.0%) did not start attending the antenatal care clinic until they were in the second trimester of pregnancy. A smaller number started before three months (24.0%) or after six months(6.0%) (Table 9).

Table 9

Commencing Antenatal Clinic

Period of pregnancy	<u>n</u>	<u>%</u>
1-3 months (first trimester)	36	24.0
4-6 months (second trimester)	102	68.0
7-9 months (third trimester)	9	6.0
Did not attend	3	2.0
Total	150	100.0

Place of Birthing

Nearly all the participants (92.3%) gave birth at a hospital. The remainder gave birth at a traditional birth attendant’s place or at her home assisted by a female relative (Table 10).

Table 10

Place of birthing

Place of birth	<u>n</u>	<u>%</u>
Central hospital	84	56.0
District hospital	34	22.6
Mission hospital	21	14.0
Traditional birth attendant	10	6.7
Home	1	0.7
Total	150	100

Labour and Birth Information Received

In question (c) of section A of the Instrument, the respondents were asked to recall labour and birth information they received during pregnancy, labour and birth. Items were originally listed by the interviewer and each mother was asked to respond to each item as they were being interviewed (Appendix C). There were four response categories and these were: No Information (value = 1), Some Information (value = 2), More Information (value = 3) and A lot of Information (value = 4). Values of the responses to each item will be presented (Table 11). The items which scored highest and lowest will be further discussed. Items are presented in the same order as they were listed in the instrument.

Table 11

Labour and Birth Information Received During Pregnancy, Labour and Birth (N= 150)

Item	<u>Responses</u>			
	No Information <u>n (%)</u>	Some Information <u>n (%)</u>	More Information <u>n (%)</u>	A Lot of Information <u>n (%)</u>
Onset of labour	20 (13.3)	63 (42.0)*	33 (22.0)	34 (22.7)
Physiological changes in labour	112 (74.7)*	27 (18.0)	3 (2.0)	8 (5.3)
Physical needs of the mother	125 (83.4)*	18 (12.0)	2 (1.3)	5 (3.3)
Emotional needs of the mother	121 (80.7)*	20 (13.3)	4 (2.7)	5 (3.3)
How midwife monitors progress	120 (80.0)*	20 (13.3)	6(4.0)	4 (2.7)
Use of medications during labour	144 (96.0)*	3 (2.0)	1 (0.7)	2 (1.3)
What could go wrong with mother	112 (74.7)*	30 (20.0)	-	8(5.3)
What could go wrong with baby	114 (76.0)*	27 (18.0)	2 (1.3)	7 (4.7)
Surgical assistance that can be given	92 (61.4)*	42 (28.0)	5 (3.3)	11 (7.3)
Reasons for surgical assistance	116 (77.3)*	25 (16.7)	6 (4.0)	3 (2.0)

*Continued/...*

Table 11 (Continued)

Item	<u>Responses</u>			
	No Information <u>n (%)</u>	Some Information <u>n (%)</u>	More Information <u>n (%)</u>	A Lot of Information <u>n (%)</u>
Pain relief in labour	141 (94.0)*	6 (4.0)	2 (1.3)	1 (0.7)
Breathing techniques	43 (28.7)	57 (38.0)*	17 (11.3)	33 (22.0)
Initial baby care by midwife	132 (88.0)*	9 (6.0)	3 (2.0)	6 (4.0)
Initial breast feeding	99 (66.0)*	24 (16.0)	12 (8.0)	15 (10.0)
Looks of newborn	144 (96.0)*	3 (2.0)	-	3 (2.0)
Capabilities of the newborn	142 (94.6)*	7 (4.7)	1 (0.7)	-
Rights during labour and birth	149 (99.3)*	1 (0.7)	-	-
Options during labour and birth	149 (99.3)*	1 (0.7)	-	-
What is expected of the mother	61 (40.6)*	31 (20.7)	18 (12.0)	40 (26.7)
Cultural beliefs and taboos	40 (26.7)	61 (40.6)*	31 (20.7)	18 (12.0)

Note: A dash(-) inserted in the table indicates there was no response for the item. A \* represents the mode.

Of much concern, was the fact that generally, across all the items measuring the amount of labour and birth information given to first time mothers, the majority of the women responded that they did not get information. Overall for only two items women indicated that they received no more than 'some information'.

Labour information given to the mothers in preparation for labour and birth focussed upon the onset of labour. One hundred and thirty mothers stated they received information about how to recognise the onset of labour; only twenty mothers stated they were not given any information.

The second most commonly cited item was breathing techniques. Fifty seven percent of the mothers indicated that they had no information on breathing exercises. However, field notes taken during data collection indicate that all participants, except one, who were given information on breathing exercises, received it during their labour and birth rather than during pregnancy.

The third most frequently given labour and birth information item was cultural beliefs and taboos about labour and birth given by traditional birth attendants, traditional counsellor, female friends and relatives. More details of this information are presented in the Qualitative findings chapter.

The fourth most frequently given labour and birth information was on what was expected of the mother by the midwives during labour and birth. Field notes indicate an expectation that mothers should not to cry and should cooperate with midwives during labour and birth.

Labour and birth information on rights and options during labour and birth were the least frequently given information to the mothers. For both items only one mother (0.7%) stated that she was given some information regarding rights and options one has during labour and birth. A total of 149 mothers (99.3%) stated that

they were not given any information regarding options and rights during labour and birth.

### Satisfaction with Information

In question (c) of section A of the instrument, the mothers were asked how satisfied they were with the labour and birth information they received (Appendix C). This question only applied to items for which the mothers stated they received information. There were four response categories: Extremely Dissatisfied (value = 1), Dissatisfied (value = 2), Satisfied (value = 3) and Extremely Satisfied (value = 4). Values of responses to the satisfaction scale are presented in Table 12. 'Valid N' in Table 12 represents the total number of mothers who received information on each item. These mothers were then asked how satisfied they were with the information they received. The percentages presented are based Valid N. The items have been presented in the same order as they were listed in the Instrument. Further description of items with highest and lowest values will follow.

Table 12

Satisfaction With Information Given During Pregnancy, Labour and Birth (Total N= 150)

Item	Valid (N)	Extremely Dissatisfied	<u>Responses</u>		Extremely Satisfied
			Dissatisfied	Satisfied	
		<u>n (%)</u>	<u>n (%)</u>	<u>n (%)</u>	<u>n (%)</u>
Onset of labour	130	2 (1.4)	23 (17.8)	94 (72.4)*	11 (8.4)
Physiological changes in labour	38	3 (8.8)	8 (21.0)	25 (65.0)*	2 (5.2)
Physical needs of the mother	25	-	4 (16.0)	19 (76.0)*	2 (8.0)
Emotional needs of the mother	30	-	6 (20.0)	23 (76.0)*	1 (4.0)
How midwife monitors progress	29	-	4 (14.0)	25 (86.0)*	-
Use of medications during labour	6	-	2 (34.0)	4 (66.0)*	-
What could go wrong with mother	38	-	11 (28.8)	25 (64.0)*	2 (8.2)
What could go wrong with baby	36	-	10 (27.7)	23 (64.0)*	3 (8.3)
Surgical assistance that can be given	58	1 (1.8)	21 (36.2)	34 (58.6)*	2 (3.4)
Pain relief in labour	9	-	3 (33.3)	5 (55.5)*	1 (0.7)

*Continued/...*

Table 12 (Continued)

Item	Valid (N)	Extremely Dissatisfied <u>n (%)</u>	<u>Responses</u>		Extremely Satisfied <u>n (%)</u>
			Dissatisfied <u>n (%)</u>	Satisfied <u>n (%)</u>	
Breathing techniques	107	3 (2.7)	24 (22.3)	73 (68.5)*	7 (6.5)
Initial baby care by midwife	18	-	4 (22.2)	13 (72.2)*	1 (5.6)
Initial breast feeding	51	1 (1.9)	7 (13.6)	40 (78.7)*	3 (5.8)
Looks of newborn	6	-	-	6(100)*	-
Capabilities of the newborn baby	8	-	-	7(87.5)*	1 (12.5)
Rights during labour and birth	1	-	1 (100)*	-	-
Options during labour and birth	1	-	1 (100)*	-	-
What is expected of the mother	80	1 (1.2)	13 (16.3)	60 (75.0)*	6 (7.5)
Cultural beliefs and taboos	111	2(1.8)	35(31.9)	68(61.5)*	6(5.8)

Note: A dash (-) inserted in the table indicates there is no response for the item. A \* represents the mode.



The results indicate that the information which participants were most satisfied with was “the onset of labour”. Of the 150 participants, 130 were given information about how one recognises the onset of labour. Of these, 105 (82.2%) were satisfied or extremely satisfied with the information they received. Twenty five participants were either dissatisfied or extremely dissatisfied with the information they received.

The second highest information item that participants were satisfied with was “cultural beliefs and taboos” about labour and birth. Of the 111 participants who were given information about cultural beliefs and taboos, 67.3% of the participants were satisfied, with the information they were given.

The third highest information item which mothers were most satisfied with was “breathing techniques”. One hundred and seven mothers were given information and 75.5% of these were satisfied with the information they received.

The fourth highest information item on satisfaction was “what is expected of the mother by the midwives during labour and birth”. Of the 80 participants who were given information, 83.0% were satisfied with the information they received.

Finally, the remainder of the items had very few mothers indicating that they received information although these mothers were satisfied with the information they received. For example items: looks of the newborn baby had six mothers indicating that they were given information and 100% were satisfied with the information they received; use of medications during labour had six mothers receiving information and 66% were satisfied with information they received. Of major concern were two items which had one mother indicating that she received information and these were “options and rights” that the mother has in labour and during birth. For both items,

she was not satisfied with the information given which meant that 100% was the score for disaffection on this item.

### Overall Satisfaction with Information

Of the 150 participants, over half (51.3%) expressed an overall dissatisfaction with the information they received in preparing them for labour and birth. Sixteen participants (10.7%) were very dissatisfied with information they received in preparing them for labour and birth. Sixty one participants (40.6%) were dissatisfied with the information they received in preparing them for labour and birth. However fifty seven participants (38.0%) were satisfied while 16 participants (10.7%) were very satisfied with the information given in preparing them for labour and birth.

### Emotional and Informational Support

In section B of the questionnaire, participants were asked to rate their level of agreement with some selected statements regarding emotional and informational support they may have been given during pregnancy and during labour and birth (Appendix C). There were four response categories: Strongly agree (value =1); Agree (value =2); Disagree (value =3) and Strongly disagree (value = 4). Values for responses have been presented in Table 13 in the same order as listed in the questionnaire. Further description of the items will follow.

Table 13

Emotional and Informational Support During Pregnancy, Labour and Birth. (N =150)

Statement	<u>Responses</u>				Majority Response
	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)	
My concerns and worries were attended to	7 (4.7)	24 (16.0)	80 (53.3)*	39 (26.0)	Disagree
I felt free to ask questions to midwives	7 (4.7)	43 (28.6)	60 (40.0)*	40 (26.7)	Disagree
I felt free to ask questions to traditional counsellor/TBA/family	74 (49.3)*	24 (16.0)	6 (4.0)	46 (30.7)	Agree
I was given consistent information between the midwife and traditional counsellor/TBA/family	5 (3.3)	39 (26.0)	60 (40.0)*	46 (30.7)	Disagree
Information given was with respect for individuality	5 (3.3)	58 (38.7)*	46 (30.7)	41 (27.3)	Disagree
Information was given with respect for my culture	3 (2.0)	63 (42.0)*	49 (32.7)	35 (23.3)	Disagree
I could share my feelings at any time	1 (0.7)	51 (34.0)	52 (34.6)*	46 (30.7)	Disagree
I was informed about changes in my labour and birth care	7 (4.7)	74 (49.3)*	36 (24.0)	33 (22.0)	Agree
My opinions about labour and birth were considered	3 (2.0)	40 (26.7)	52 (34.7)	55 (36.6)*	Disagree

*Continued/...*

Table 13 (Continued)

Statement	<u>Responses</u>				Majority Response
	Strongly Agree <u>n (%)</u>	Agree <u>n (%)</u>	Disagree <u>n (%)</u>	Strongly Disagree <u>n (%)</u>	
I was given helpful suggestions by midwives about labour and birth	10 (6.7)	97 (64.6)*	28 (18.7)	15 (10.0)	Agree
I was given helpful suggestions by traditional counsellors/TBA/family about labor and birth	34 (22.7)	82 (54.6)*	12 (8.0)	22 (14.7)	Agree

Note: A\* represents the mode. The abbreviation TBA in Table stands for traditional birth attendant

Overall the highest informational and emotional support that the mothers received came from traditional counsellors/traditional birth attendants. The majority reported receiving helpful suggestions from family members and traditional helpers (77.3%) although the mothers also reported receiving helpful suggestions from midwives(71.3%). The majority (79.3%) felt their concerns and worries were not attended to. They found it difficult to ask questions of midwives (33.4%) but the majority (65.3%) were able to ask questions to traditional helpers and family. The majority (65.3%) could not share their feelings anytime. Also high on the list was the problem of inconsistent information being given by midwives and traditional folk/family (70.7%) and information not given with respect for culture (56.0%) and individuality (58.0%).

#### Sources of Information

Participants were asked the extent to which they were given information by different sources (Appendix C). Values of responses to the extent which they were given information are presented in Table 14. There were four response categories: None (value = 1), Some Information (value = 2), More Information (value = 3) and A lot of Information (value = 4). Further descriptions are given for the highest and lowest scores.

Table 14

Sources of Information (Valid N =150)

Source	No Information n (%)	Responses		A Lot Information n (%)
		Some Information n (%)	More Information n (%)	
Mother	97 (64.7)*	24 (16.0)	9 (6.0)	20 (13.3)
Aunt	121 (80.7)*	13(8.7)	3 (2.0)	13 (8.7)
Friends	72 (48.0)*	42 (28.0)	13 (8.7)	23 (15.3)
Traditional counsellor/TBA	61 (40.7)*	27 (18.0)	23 (15.3)	39 (26.0)
Grandmother	111 (74.0)*	11 (7.3)	6 (4.0)	22 (14.7)
Midwife	26 (17.3)	59 (39.3)*	30 (20.0)	35 (23.3)
Doctor/Clinical officer	109 (72.7)*	21 (14.0)	3 (2.0)	17 (11.3)
Mass media	116 (77.3)*	18 (12.0)	4 (2.7)	12 (8.0)
Sister	127 (84.7)*	13 (8.7)	2 (1.3)	8 (5.3)

Note: A \* in Table 14 represents the mode.

The findings showed the midwife as the predominant source of labour and birth information. The majority of mothers(82.6%) had been given some information by the midwives. Field notes also indicated that the person whom the participants interacted with most often during pregnancy and birth was the midwife. Secondly, the results show that the traditional counsellor was second to the midwife in giving information to the mothers. Over half of the mothers (59.3%) had been given information by a traditional counsellor. The least frequently cited sources of information were: the Doctor/Clinical Officer(27.3%); Mass media (19.7%) and Sister (15.3%).

### Relationships and associations between selected variables

Coakes and Steed (1996) point out the need to ensure that all assumptions underlying correlation are not violated. The variables which were correlated in this study met all the assumptions underlying a Pearson Product-moment correlational analysis. The assumptions were: data must be collected from related pairs (score on x and y variables are obtained from the same subject); data should be interval or ratio in nature; the scores within each variable should be normally distributed; the relationship between the two variables must be linear and the variability in scores for one variable is roughly the same at all values of the other variable (homoscedasticity).

Identification of bivariate outliers was done using Mahalanobis distance scores. Extreme outliers were eliminated prior to the analysis (Subjects eliminated are indicated in the tables). In all cases the alpha level was set at 0.05.

### Relationship Between Total Information and Selected Variables

The correlations were performed to determine the relationship between the variable "total information" and the following variables: "overall satisfaction with information; age; number of visits made to the antenatal clinic; educational level of the mother; gestation of pregnancy; and the source of information". The findings are presented in Table 15.

Table 15

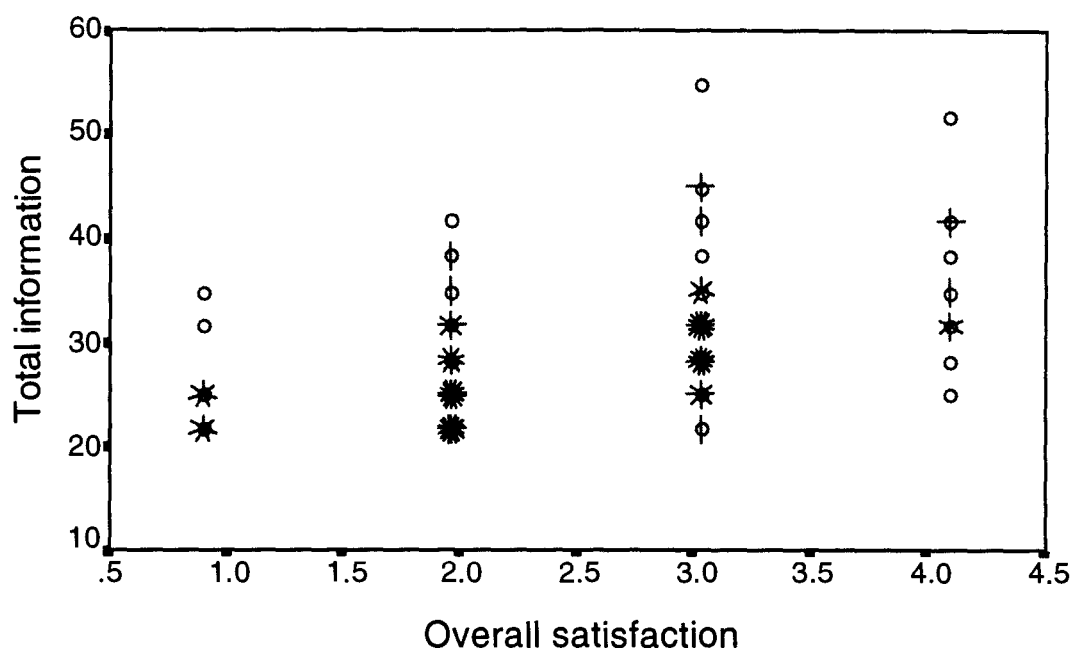
Correlation Matrix for Total Information and Selected Variables

Relationship Between Total Information and	Correlation $r$ value	Significance $p$ value	Total N	Extreme Outlier Subject number
Overall satisfaction	.5455	.000*	149	44
Age of the mother	.1845	.025*	148	44, 51
Number of visits made	-.0546	.511	147	44, 74, 112
Educational level	.1097	.183	149	44
Gestation	.1453	.077	147	44, 74, 112
Family source	.4364	.000*	148	44, 108
Professional source	.6815	.000*	148	44, 108

Note. \* $p < .05$ .

The results of the study indicate a positive relationship between total information that the mother received and overall satisfaction with the information in preparing her for labour and birth ( $r=.5455$ ,  $p=.000$ ) suggesting that the more information the mother received, the more satisfied she was. The relationship is illustrated in Figure 3. In the figure, the sunflowers indicate that most mothers were between point 2.0 on y axis and points 2 and 4 on x axis indicating that the more total information they received, the more satisfied they were. There are two influential data points which are above the whole group. These points may be influencing the strength of the relationship. They were included because they were not identified as extreme outliers, however, removing them could have improved the strength of the relationship.





Note. Number of petals on sunflowers indicates number of subjects

Figure 3. Scatter Plot for Total Information and Overall Satisfaction with Information

The results also show strong relationships between total information and family ( $r = .4364$ ,  $p = .000$ ) and professional sources of information ( $r = .6815$ ,  $p = .000$ ). These results indicate that the more information the mother received from family source and professional source, the more total information she ended up having. However there were very weak relationships between total information and age of the mother and the gestation when the mother started antenatal visits because the results failed to reach significant values. These results are surprising because one would think the older the mother the more total information she may have had and also the earlier in pregnancy the mother started antenatal clinic, the more total information she may have had. There is a negative relationship between the total information and number of visits made to the antenatal clinic but the magnitude of the relationship is extremely weak (Table 15) which is also startling because one

would think the more visits the mother made to the antenatal clinic, the more information she may have received.

#### Relationship Between Overall Satisfaction with Information and Selected Variables

Correlations were performed to determine the relationship between the variable “overall satisfaction with information” and variables: “age; number of visits made to the antenatal clinic; educational level of the mother; gestation of pregnancy; and the sources of information”. Table 16 has the details.

Table 16

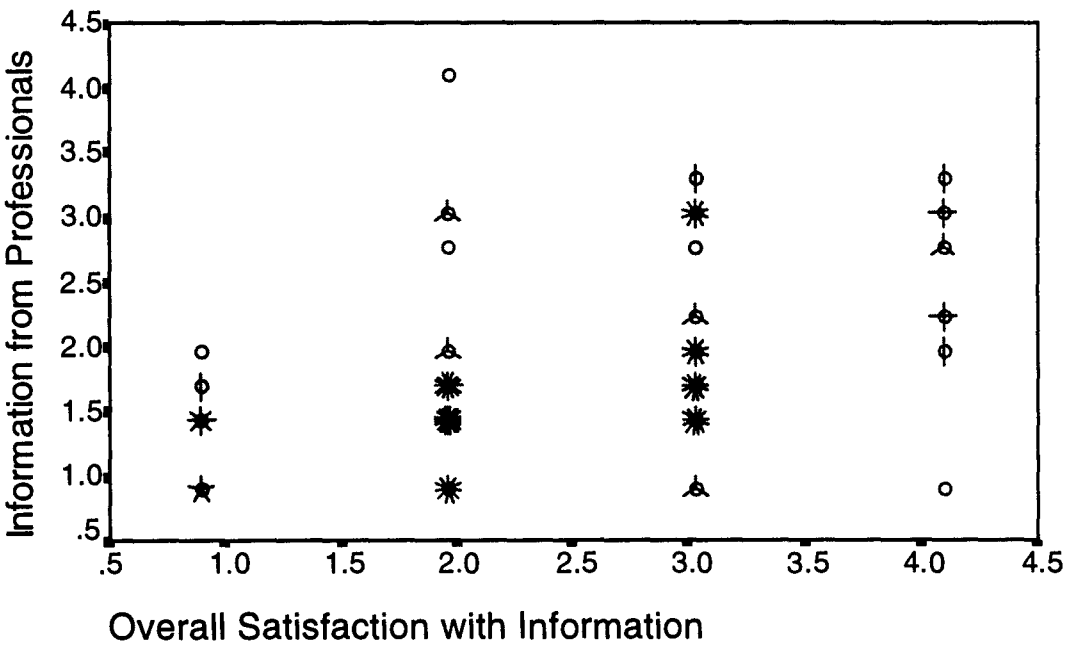
#### Correlation Matrix for Overall Satisfaction and Selected Variables.

Relationship Between Overall Satisfaction With Information and	Correlation  r value	Significance  p value	Total N	Extreme Outliers  Subject Number
Age of the mother	.1474	.072.	150	none
Number of visits made	-.1546	.060	149	44, 74, 112
Educational level	-.0623	.449	150	none
Gestation	.2573	.001*	150	44, 74, 112
Family source	.2964	.000*	148	44, 112
Professional source	.5449	.000*	148	44, 112

Note. \* $p < .05$ .

The results show a very strong relationship between overall satisfaction with information and professional source of information ( $r = .5449$ ,  $p = .000$ ) as illustrated in figure 4 suggesting that the more information mothers received from professional staff, the more satisfied they were. There is also, a strong relationship between overall satisfaction with information and gestation when the mother started attending antenatal clinic and family source of information (Table 16). These results indicate

that the more information the mothers received from their families, the more satisfied they were too but this was below their satisfaction with professional information. The earlier the mother started attending antenatal care in terms of her gestation, the more over all satisfied she was. This is in contrast with the fact that the relationship between the gestation and total information failed to reach significant findings. There were weak relationships between overall satisfaction with information and age of the mother. This may have been related to the previous finding which indicated weak relationship too between age of the mother and total labour and birth information received. Surprisingly, there were no relationships between overall satisfaction and number of visits made to the antenatal clinic and educational level of the mother.



Note. Number of petals on sunflowers indicates number of subjects

Figure 4. Scatter Plot for Overall Satisfaction and Information from Professional sources

### Post-hoc Factor Analysis

Factor analysis was performed on 20 items which were measuring the amount of labour and birth information received in Sub-section (d) of Section A of the instrument (Appendix D). Factor analysis was done to try to reduce the variables into smaller set of underlying factors that summarised the essential information contained in the variables (Coakes & Steed, 1996).

Principal-axis factoring with varimax rotation was performed on 20 items which were developed to examine labour and birth information given to first time mothers in Malawi. Data were screened to ensure that assumptions underlying factor analysis were not violated. Outliers were checked for as well as absence of multicollinearity. Data appeared to be suitable for factoring. An examination of the correlation matrix showed that a considerable number of correlations exceeded .3. The Barlett Test of Sphericity was significant and the Kaiser- Meyer- Olkin Measure of Sampling adequacy was .70739 greater than .6 which is the recommended. Seven factors were extracted for the instrument because they had eigenvalue of greater than 1. These explained 62.1 % of variance, however, most variables were complex because they had loadings on more than one factor. To simplify the interpretation, an oblique rotation was then done. This provided a pattern and structure matrix (Tabachnick & Fidell, 1989). Pattern matrix is presented in Table 17 and structure matrix is presented in Table 18.

Table 17

Pattern Matrix from Factor Analysis

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Reasons for using medical/surgical help	.64789						
What could go wrong with the mother	.58446						
Medical/surgical assistance given	.56766						
Use of medications during labour	.55741					.46418	
How the midwife monitors labour	.46657						
What could go wrong with the baby	.36593	.30738					
Immediate baby care		.86096					
Emotional needs of the mother		.62176					
How the baby looks like		.41899				.34263	
What is expected of the mother			.91640				

*Continued/...*

Table 17 (*Continued*)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Breathing and relaxation techniques			.47210				
Physical needs of the mother				.88018			
Physical changes of the mother							
Mother's rights during labour							
What the newborn baby's capabilities					.88531		
Use of medication to relieve pain					.3097		
Options during labour and birth						.39540	
Initial breast feeding							
How to know that labour is starting							-.51607
Cultural beliefs and taboos about labour							-.48602

Table 18

Structure Matrix from Factor Analysis

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Reasons for using medical/surgical help	.68160						-.35348
What could go wrong with the mother	.61660			.34518			
Use of medications during labour	.589771					.57905	-.35228
Medical/surgical assistance given	.58631						
How the midwife monitors labour	.54050	.31395					
What could go wrong with the baby	.49267	.39532					
Physical changes of the mother	.44862			.41288			-.40516
Immediate baby care		.86496					
Emotional needs of the mother		.65875			.37292		

*Continued/...*

Table 18 (*Continued*)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
How the baby looks like	.40128	.49728				.42197	-.39479
What is expected of the mother			.91663				
Breathing and relaxation techniques			.54336				-.39479
Physical needs of the mother				.81573			
Initial breast feeding							
Mother's rights during labour							
Use of medication to relieve pain					.34017		
Options during labour and birth						.38468	
How to know that labour is starting			.32310				-.57893
Cultural beliefs and taboos about labour							-.48396



The pattern matrix shows a unique relationship between the factor and the variable. Therefore in this analysis, the pattern matrix was used to interpret the findings because the loadings had a simpler structure. Although seven factors had eigenvalue of above 1, factor one and two are more dominant than the other factors. Scree plot also revealed dominance of two factors. Figure 5 represents a scree plot for the factors after the rotation showing the eigenvalues of the factors.

Examination of the items indicates that these items represent conceptually distinct aspects of the mother's physical needs during labour and birth and the baby's aspect of labour and birth information. The other factors were not interpreted although they had eigenvalue of over one because they had only two variables loaded on and sometimes not these variables were not pure. Variables representing factors one and two will be discussed in the Chapter Six.

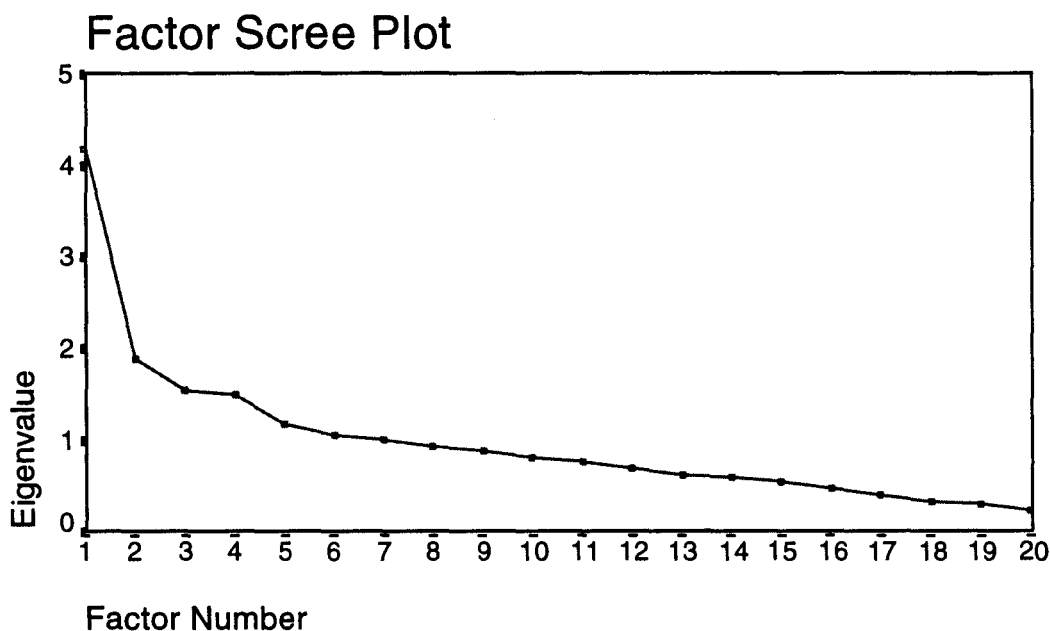


Figure 5. Scree Plot for the Twenty Factors

### Summary of Chapter

This chapter presented results from the quantitative data. Demographic information revealed that a Malawian first time mother is likely to be young with low educational level and socio economic status. She will be married with a religious affiliation. Her antenatal clinic attendance would be poor and she would give birth at a hospital.

A Malawian first time mother would have received little labour and birth information at a hospital and what information she did receive would have been given by a midwife. At home she would have received a lot of information related to cultural beliefs and taboos about labour and birth from family members and traditional helpers. In addition a first time mothers would not be satisfied with the amount of labour and birth information she received in preparing her for labour and birth.

The major sources of information for first time mothers in Malawi are female relatives, traditional counsellors, traditional birth attendants and midwives. Doctors and mass media are the least common sources of labour and birth information.

First time mothers in Malawi are not satisfied with the informational and emotional support received from midwives. They feel that traditional folk and female relatives give them more support during pregnancy, labour and birth period.

The results revealed a strong relationship existed between the amount of labour and birth information received and overall satisfaction with information. Factor analysis done on the instrument measuring labour and birth information revealed two dominant factors patterning to the mother's and baby's aspect of labour and birth information.

## CHAPTER FIVE

### Qualitative Results

This chapter presents the findings from the qualitative data derived from the responses to open ended questions. The sample characteristics have been presented in the Quantitative results chapter. Content of the responses was analysed manually through identification of themes and subthemes. Responses from the mothers were given in Chichewa language and the researcher translated them into English language. Medical terms are used where there is no appropriate literal word in English. Some direct quotes from the respondents will be presented and these were taken from mothers who were more articulate and open in their responses. The qualitative analysis draws on responses from the following sections of the instrument:

#### Section A

- a) During pregnancy and birth, what information were you given about labour and birth at the hospital?
- b) During pregnancy and birth, what information were you given about labour and birth at home?
- c) Please tell me what other information you would have liked to know about labour and birth?

#### Section C

- b) Do you have any suggestions for improving the giving of labour and birth information to first time mothers? If yes, please explain.

The results will be presented in the same order in which the questions were asked.

**“During pregnancy and birth, what information were you given at the hospital about labour and birth?”**

Responses from mothers were varied and after content analysis, the responses were clustered into four themes with eighteen subthemes. The summary of the themes are presented in Table 19. The number column in Table 19 indicates the number of women who identified the subthemes. Further description of subthemes which were frequently identified will be presented. If a respondent mentioned a subtheme more than once, it was counted once only.

Table 19

**Labour and Birth Information Received at the Hospital**

Themes and Subthemes	Number	Percentage
<b><i>1. Information for before labour</i></b>		
Signs of onset of labour	111	74.4
Preparation for labour/birth	60	40.0
I was not given any specific information about labour and birth	14	9.3
Taking traditional drugs before and during labour	3	2.0
Need for rest and exercises in preparation for labour	3	2.0
Importance of hospital birth	3	2.0
<i>Continued/...</i>		

Table 19' (Continued)

Themes and Subthemes	Number	Percentage
<b>2. Information for during labour</b>		
Positions during labour	41	27.3
Crying during labour	36	24.0
Cooperating with midwives during labour	31	20.7
Breathing Exercises in labour	25	16.7
What could go wrong during labour and birth	11	7.3
To eat soft food in labour	10	6.7
Monitoring labour progress	9	6.0
Process of labour	3	2.0
Assistance that can be given to the mother during labour	8	5.3
<b>3. Information for birth</b>		
Bearing down during birth	65	43.3
How actual birth occurs	9	6.0
<b>4. Information for after the birth</b>		
Initial breast feeding	5	3.3

The mothers who were interviewed described the eighteen subthemes as information which was given during pregnancy, labour and birth at the hospital. The four most common subthemes will further be described in detail, while the remaining will be described in brief. "PN" in the description represents the respondent who was quoted.

### Onset of labour

Most mothers expressed that the information given at a hospital setting during antenatal visits by the midwife was mostly about the onset of labour. Some mothers stated the following statements:

When I start experiencing lower abdominal pains, backache, sticky blood stained vaginal discharge and watery discharge, I should know that labour has started. (PN3)

When I start having aching body pains especially in my back and abdomen I should get prepared and go the place of birth immediately. (PN 7)

If I experience water running through my vulva and legs, it means that waters have broken and labour is about to start. (PN 9)

### Preparation for labour and birth

The mothers also said that after being told about the signs of onset of labour and birth, they were told what they should do in preparation for labour and birth. The information focussed upon the materials the mother needed to have before labour starts. One mother said that:

The midwife told me to ensure that I have clothes for the baby, underwear materials for myself. I should pack them and move around with them in the last month of the pregnancy. (PN 22)

Another mother said that:

I was advised to look for materials such as chitenje for the baby and for myself before the onset of labour.(PN 9) [Chitenje is a wrapper used by women to dress the lower part of the body from the waist to the feet as illustrated in Appendix M]. Chitenje can be used to wrap the baby.

### Bearing down techniques

The mothers stated that during labour and for some even during the actual birthing they were given information about bearing down techniques. This information was not given by the midwife at the hospital during pregnancy. This was true for all mothers who identified this aspect of information on bearing down, except for one mother who said that the information was given to her during pregnancy at an antenatal clinic visit. One mother described her experience as follows:

At the antenatal clinic the doctor who was going to conduct the birth of my baby told me that during birth, at a specified time I will be told to push as if I am passing stools. (PN 39)

Another one similarly said that:

When I was in labour the midwife told me that when the time of giving birth comes, I should take a deep breath and push down as if I was passing stools. (PN 101)

This was further reinforced by another mother who stated that:

During labour, the midwife told me that when time to give birth comes, I should not be crying but I should take deep breaths and push as if I was passing stools. (PN 117)

A mother who had not been given prior information before actual birth said that:

I felt something pushing on my bottom. I shouted for the midwife who came immediately and told me that it was time to give birth. She told me that I had to be taking deep breaths and push as if I was passing stools. She advised me to be resting when I got tired of pushing. (PN 120)

### Positions during labour and birth

The best positions for the mother to lie during labour and birth were part of the information that some of the respondents said they were given. This information was only given when they were already in labour. Most mothers repeatedly stated the following:

The midwife told me that I should be lying on my right or left side throughout labour. She did not give the reason for this. Every time I wanted to sit or stand she stopped me and said I was going to kill the baby. (PN 9)

The midwife helped me to lie on my left side during labour. During actual birth, she assisted me to lie on my back with legs bent and apart. (PN 12)

After admitting me in labour ward, the midwife assisted me to a bed and told me that I should be lying on my sides, especially the left side. I was not allowed to lie in any other way throughout labour. (PN 76)

When time to give birth came, the midwife assisted me to lie on my back with my legs bent and apart. (PN 78)

### Crying in labour

At some antenatal clinics the issue of crying in labour was covered during health education classes. The mothers expressed that this information was commonly given to them during the actual labour and birth in the hospital setting but also during pregnancy at home. One mother stated that:

I was crying because I could not bear the labour pains. The midwives who were in the ward at that time shouted at me and said that I was not allowed to cry in labour. (PN 91)



Another mother described her experience as follows:

The midwife who admitted me to the hospital told me that I should persevere because labour is painful. She further stated that crying in labour delays labour progress. (PN 5)

The fact that crying delays labour progress was emphasised by another mother who said that:

I could not bear the pain any more, although I had been advised not to cry in labour by the traditional counsellor. The midwife shouted at me and stated that I was behaving as if I was never counselled about crying during labour at home. (PN 9)

#### Remaining subthemes under labor and birth information received at the hospital

Firstly, 20.7% of the mothers explained that most midwives at the hospital gave information about the importance of cooperating with them during labour and birth. The mothers stated that the midwives used threatening statements such as:

“You or your baby will die if you are not cooperative during labour and actual birth.” (PN 6)

Secondly, 16.7% of the mothers expressed that they were given information about deep breathing exercises as a measure of relieving pain during labour. All mothers who identified this theme explained that this information was given during labour and not during pregnancy.

Thirdly, 9.3% of the mothers claimed not to have been given any specific information related to labour and birth. These mothers, explained that information given at antenatal clinics focussed on pregnancy and not birth. The whole time they attended antenatal care clinic there was no mention of labour and birth information. Field notes indicate these women arrived at the hospital in advanced labour.

Finally, other areas of information identified by only a few mothers were: what could go wrong to the mother and baby during labour and birth (7.3%); importance of eating soft food for energy in labour (6.7%); how the progress of labour is monitored (6.0%); how actual giving birth occurs (6.0%); assistance that can be given during labour and birth (5.3%); initial breastfeeding (3.3%); reasons for avoiding taking traditional medicine (2.0%); process of labour before birth (2.0%); need for exercise and rest in preparation for labour and birth (2.0%) and the importance of a hospital birth (2.0).

### Summary

Mothers received different aspects of labour and birth information at the hospital. The information was mainly given by the midwife. Emphasis was placed on signs of onset of labour and 'proper' behaviour during labour i.e. no crying and obeying the midwife. However, other aspects did not receive much attention.

### **“During pregnancy and labour, what labour and birth information were you given at home?”**

There were many responses to the question about labour and birth information given at home because most mothers gave multiple responses. The information received at home was provided by either one or more of these: a traditional counsellor, traditional birth attendant, female relatives and female friends. After content analysis the mothers' responses were categorised into 3 themes and 31 subthemes (Table 20). The number column in Table 20 represents the number of mothers who identified the subtheme. If a respondent mentioned a subtheme more than once, it was counted only once.

Table 20

Labour and Birth Information Received at Home

Themes and Subthemes	Number	Percentage
<i>1. Actions which prolong labour</i>		
Standing or sitting at door during pregnancy	70	44.3
Walking direction during pregnancy	29	22.7
Laziness during pregnancy	25	16.7
Depression and quarrels during pregnancy	21	14.0
Crying in labour	14	9.3
Peeping through a window during pregnancy	10	6.7
Onset of labour	9	6.0
Unfaithfulness during pregnancy	9	6.0
Tying a knot on Chitenje during pregnancy	9	6.0
Assisting another pregnant woman to lift luggage during pregnancy	6	4.0
Sitting on the on 'mtondo' during pregnancy	5	3.3
Eating other people's food during pregnancy	5	3.3
Crossing legs during pregnancy	5	3.3
Putting hands on head during pregnancy	4	2.7
Standing at crossroads during pregnancy	3	2.0
Starting off for the place of birth	3	2.0
<i>Continued/...</i>		

Table 20 (*Continued*)

Themes and Subthemes	Number	Percentage
<b>2. Actions causing poor outcomes for baby</b>		
Eating hot, spicy food during pregnancy	14	10.0
Preparation for labour	9	6.0
Drinking while standing during pregnancy	8	5.3
The way one carries luggage during pregnancy	6	4.0
Sex in pregnancy	5	3.3
Wearing necklaces during pregnancy	5	3.3
Eating eggs during pregnancy	4	2.7
Holding things in hands during pregnancy	4	2.7
Carrying empty bags during pregnancy	4	2.7
<b>3. Actions which enhance labour</b>		
Positions in labour	40	26.7
Use of traditional medication during pregnancy and in labour	14	9.3
Eating okra before birth	8	5.3

The mothers described the labour and birth information they were given at home. The information mainly comprised cultural beliefs, taboos and practices regarding labour and birth. Each mother described the person who gave her the information. The first eight commonly identified subthemes will be further described while the remaining will be presented in Table 20.

### Sitting or standing at a door step during pregnancy

The majority of the mothers (44.3%) expressed that at home they were given instructions that they should not sit or stand on any door step during pregnancy. This applied to both the woman and the man responsible for the pregnancy. The mothers were told that standing or sitting at the door step could lead to prolonged labour as the baby would be stuck on the pathway during actual birth. Field notes taken during the interviews show that this was a predominant theme. The following are some of the statements commonly stated by the mothers:

The traditional Counsellor, advised me not to sit or stand on the door step at any time during pregnancy. She further explained that if I do this I was going to experience prolonged labour as a result of the baby being stuck at the birth canal. (PN 9)

My neighbour found me sitting at the door step of our house. She called me and said that I was not supposed to sit at the door step because the baby was going to be stuck at the birth canal. (PN 38)

As part of the information about giving birth that my mother told me, I was told not to stand at the door step of any building. She further said that my husband too should avoid doing this, otherwise I would not be able to give birth normally, but by operation. (PN 22)

The women who counselled me told me that I should avoid standing or sitting at the door step of anything-buildings, cars. They said if I did this I was going to have difficult labour and birth because the baby would be stuck at the birth pathway. (PN 61)

### Positions in labour

There were variations in the type of information that mothers received concerning recommended positions in labour and during birth. The variations related to where the mother was planning to give birth. For mothers who were planning to give birth at the hospital, they were told that they will be lying on beds or on the floor where beds were not available. These mothers were told that at the hospital they will be expected to lie on their sides or back. For mothers who were planning to give birth

at home or at a traditional birth attendant's place they were given different information. One mother described her experience in this way:

The traditional birth attendant told me that I could be walking around during labour if I felt like doing so. If I wished to sleep I could sleep in any position provided I did not sleep on the stomach because I would squeeze the unborn baby to death. During actual birth, she brought 'mtondo'. [Mtondo is a home made mortar which is used by women to process maize into flour which is used to make the main dish in the home (Appendix N)]. I was told to sit on mtondo and she encouraged me to push down on mtondo until the baby was born. (PN 52)

Another woman had this story to tell:

My aunt is the one who assisted me to give birth because I was too late for a hospital birth. During actual birth she helped me to sit in a squatting position and to push down as if I was passing stools. (PN 19)

The story of another mother was slightly different:

The traditional birth attendant told me that I could walk around provided I did not go far and should not be seen by men. During actual birth, she brought something called nkhata. [Nkhata is a round thick band with a hole in the middle made by a cloth or glass and it is normally used as a head protector by women when they carry water buckets or any luggage on top of their heads (Appendix O)]. She told me to be pushing against nkhata until the baby was born. (PN 21)

### Walking direction during pregnancy

Most of the mothers expressed that they were informed about walking direction during pregnancy. The mothers were told that walking directions during pregnancy could influence labour progress as the baby would do the same during birth

The statements they stated were similar and some of them follow:

The traditional counsellor told me that every time I walked I should go in a forward motion, never backward. She said that if I moved backwards I would have difficult birth because the baby would be doing the same at the birth canal. (PN 19)

I was told that when I passed through a pathway or road, on my way back, I should not come through the same way because the baby would be appearing at my private area then going back during actual birth. (PN 51)

My aunt told me never to go backwards at any time during pregnancy because the baby would do the same during birth therefore I would experience delayed labour and birth. (PN 24)

### Idleness and laziness in pregnancy

The mothers who identified this theme explained that at home there were given information about being idle and lazy during pregnancy. They were told that idleness and laziness during pregnancy could lead to prolonged labour because the baby becomes idle and lazy to come out. One mother stated that:

I was told that I should be active throughout pregnancy and avoid being lazy or idle because the baby was going to do the same. There was going to be delay in onset of labour or prolonged labour because the baby would be lazy or idle too during actual birth. (PN 61)

Another mother said that:

I was told that I should be active during pregnancy and in early labour in order to have a quick labour and birth. (PN 2)

This was echoed by another woman who said that:

When labour begins, I should clean the house, draw water, cook food for the family and do any other chores before I leave for the place of birth. This would promote a quick birth. If I just sat idle, I would experience prolonged labour because the baby would do the same. (PN 6)

### Depression/quarrelling with other people during pregnancy

Mothers who identified this theme expressed that they were warned to avoid quarrels and arguments with other people even if they were relatives. Furthermore, they were advised to avoid being depressed about anything during pregnancy. The reasons given included the following:

.....because I would experience difficult labour as result of being bewitched.  
(PN 120)

The baby will likewise be depressed at birth meaning that he or she would take time to breathe. (PN 51)

The people I argued with would wish me bad luck. (PN 39)

### Use of traditional medicine to enhance labour

A traditional mixture called 'Mwanamphepo' was being given to some pregnant women and they were being advised to drink it throughout pregnancy, once labour begins and during labour for those giving birth at home. Mwanamphepo is a herbal mixture but its real components are kept as a secret by the people who make it.

This was what some participants had to say about Mwanamphepo:

Mwanamphepo was given to me throughout pregnancy and just before I left for hospital to give birth. I was however advised not to reveal this to the midwife if I was going to be asked about this. (PN 6)

Before I started for the hospital, my mother gave me Mwanamphepo to drink. (PN 2)

Mwanamphepo was given to me to protect the pregnancy, baby and to ensure an uncomplicated birth. (PN 38)

### Crying in labour

The mothers expressed that crying in labour was unacceptable behaviour in the culture. It was a sign that the woman was weak and she could not bear labour. They were told that at the hospital if they cry, they would be given an operative delivery such as caesarean section or the midwife would perform an episiotomy. Furthermore, one mother said:

I was told that when one cries during labour, she takes in cold air which causes distress to the unborn baby. (PN 131)

Another mother said:

I was told that if I cried during labour, the birth canal would close and I would give birth by operation. (PN 120)



### Eating spicy foods during pregnancy

Mothers were told that eating hot spicy food would lead to excessive labour pains. This was also believed to cause baby to be born with of sticky, swollen and red eyes.

I was told that I should try to avoid eating hot spicy foods because I would experience excessive labour pains and the baby would be born with red, sticky eyes. (PN 52)

### Sneaking a look through a window or door on labour

The mothers expressed that sneaking a look /peeping through a window or door was unacceptable during pregnancy. The mothers were told the practice would lead to prolonged labour. The reasons given were:

The baby would be doing the same during birth. The head would appear at the private area and would go back as I tried to bear down. (PN 24)

This advise was also to be given to the husband so that he should avoid doing this as it would have the same effect on the mother when she was giving birth.

### Description of the remainder of the subthemes

Table 21 will list the remainder of the subthemes on the information that was given at home, their effects on labour/birth and the reasons behind them and/or what the woman was supposed to do.

Table 21

Description of Remaining Subthemes of Information Received at Home

Subtheme	Reason/Action/Effect
Onset of labour- lower backache, abdominal pains, draining water	The mother should go to place of birth when the signs were advanced to avoid overstaying before giving birth
Unfaithfulness by both partners during pregnancy	Leads to delayed labour and birth. The unfaithful partner has to admit to close relatives if labour is to progress well
Tying a knot on a chitenje during pregnancy	To be avoided because it will be 'tie her labour' and will experience delayed labour
Preparation for labour /birth	Two views: 1. To prepare for her clothes and cloths used as sanitary towels, baby clothes. She is expected to carry them wherever she goes. 2. Not to prepare much until baby is born "Sagula mbereko mwana asanabadwe"[This means that you do not buy clothes for unborn baby because the pregnancy can be lost]
Eating okra during pregnancy	Promotes fast labour and birth
Drinking water or any drink while standing	To be avoided as the unborn baby will vomit in the uterus and will choke and may die thus giving birth to a dead baby
Carrying any luggage	To avoid carrying two bags at the same time because this can result in giving birth to twins

*Continued/...*

Table 21 (*Continued*)

Theme	Reason/Action/Effect
Assisting another pregnant woman to lift any type of luggage	She would wait for that woman to get into labour too and you would give birth at the same time which may have implications for delayed onset and prolonged labour
Sex in pregnancy	To stop as early as 5-7 months. To avoid giving birth to a baby fully covered by "whitish stuff"- and this is a disgrace to the culture
Wearing necklaces in pregnancy	To be avoided because the baby will be born with a cord around the neck
Sitting on mtondo during pregnancy	To be avoided because one can experience prolonged labour
Eating food prepared by people she does not know very well	This is not acceptable in pregnancy because the food could be bewitched and she can have prolonged labour
Crossing legs whilst sitting down during pregnancy	The unborn baby may assume an abnormal presentation such as breech or transverse lie because of reduced room in the womb
Eating eggs in pregnancy	To avoid giving birth to a sick baby who may have sticky, red eyes
Holding things in hands	To avoid holding things all the time because the baby will be born with a cord in the hands
Carrying empty bags	"I would come back from the hospital empty handed" (PN 59) meaning that she could give birth to a dead baby
Placing hands over the head	This should be avoided because the baby will be born with arms placed over the head

*Continued/...*

Table 21 (*Continued*)

Theme	Reason/Action/Effect
Whom to tell when starting off for the place of birth	To avoid telling anybody she met except for very close relatives because every person she told would have to come to see her before she gave birth
Attending funerals	To be avoided and if the person who had died was close, she could attend but not sit close to the coffin because she could give birth to a dead baby
Swallowing saliva when she saw a lame person	Not to swallow saliva when she saw such a person because she would give birth to a lame baby
Eating hot food	To be avoided because she could give birth to a baby with blisters all over the body

## Summary

Mothers are given labour and birth information at home by traditional folk, family and friends. The information mainly comprises of cultural beliefs, taboos and practices regarding labour and birth. The amount of labour and birth information given at home is more than that given at the hospital.

### **“Please tell me any other information you would have liked to know about labour and birth?”**

The participants described different areas of information they would have liked to know about labour and birth. After content analysis, 3 themes and 21 subthemes emerged and are presented in Table 22. The four most frequently cited subthemes will further be described more detail.

Table 22

#### Information Participants Would Have Liked to Know

Themes and Subthemes	Number	Percentage
<b>1. Rights of mother</b>		
The rights of the mother during labour	45	30.0
Options that a mother can have during labour and birth	13	8.7
<b>2. The process of labour and birth</b>		
The process of labour and birth	43	28.7
Admission procedure for woman during labour	21	14.0
What could go wrong during labour and birth	20	13.3
Indications for interventions during labour	14	9.3
		<i>Continued/...</i>

Table 22 (*Continued*)

Themes and Subthemes	Number	Percentage
<b>2. The process of labour and birth (<i>Continued...</i>)</b>		
The nature of labour pains and pain relieving measures available	14	9.3
Positions during labour and birth	11	7.3
Physical needs of the mother during labour	10	6.7
Bearing down techniques	10	6.7
Emotional needs of the mother during labour	8	5.3
Cultural beliefs and taboos about labour and birth	7	4.7
The use of medications during labour	6	4.0
What is expected of the mother during labour and birth	6	4.0
Onset of labour	6	4.0
How to prepare for labour and birth	6	4.0
Deep breathing exercises	5	3.3
<b>3. The newborn</b>		
Initial baby care	6	4.0
How the newborn looks	4	2.7
What the newborn is capable of doing	2	1.3

#### Rights of the mother during labour and birth

The majority of the mothers (30.0%) who responded to this question, identified the rights that the mother has during labour and birth. The mothers expressed lack of information about this. Some said that this resulted in fears about asking the midwife for

certain things like decisions about how she wanted to handle the birth process. One mother said this:

I had no idea about the rights I had as a mother during labour and birth.” (PN 61)

I was not sure whether demanding my rights during labour and birth would be considered as being rude by midwives. (PN 24)

The mothers therefore, felt that they would have liked to know what their rights concerning labour and birth were. They thought that if they had known this information they could have asked for the care they wanted or they could have participated in making decisions regarding their labour and birth.

### The process of labour

The second theme of the process of labour and birth, was identified by 28.7% of the mothers. The mothers expressed that they would have liked to be clearly taught about the process of labour in the most simplest manner. One mother described her story like this:

I was never really aware of what really happens during the process of labour and birth. Everything was new to me. The information I was given was in bits and pieces. This did not give me a clear picture about labour and birth.

Another mother said:

Now that I have gone through labour and birth, I know what it all involves, otherwise I was not really given information about what I should experience during labour and birth. I really wish I had been given this information. (PN 9)

### Admission procedure of a woman in labour

The third theme that mothers (14.0%) identified was the admission procedure of a woman in labour. The mothers felt that they had not been prepared for admission during labour. They therefore expressed a wish to have been informed about what they should have expected to experience during their admission to hospital when they were in labour. One mother said:

When I arrived at the hospital, Everything was new to me. The midwife was just giving me instructions concerning what I was supposed to do. I wish I could have been told before hand what was going to happen during the admission process. (PN 120)

This was echoed by another mother who said:

I wish I had been given information about the admission process in labour.” (PN 22)

### What could go wrong during labour and birth

The fourth subtheme identified by mothers (13.3%) was on what could go wrong with the mother and the baby during labour and birth. The mothers felt this information was worth knowing for someone who has not given birth. Some of the mothers felt this could have reduced anxiety that they had because of lack of information.

### Summary

Mothers identified their own areas of need regarding labour and birth information. Some of the subthemes are similar to what they were given but in some instances they identified areas that were not given to them. There is also evidence from the results that there is a difference on priorities from both the providers' and the mothers, point of view.



**“Do you have any suggestions for improving labour and birth information giving to first time mothers? If yes, please explain.”**

The mothers who responded positively to this question came up with a number of responses which were clustered into eight themes and presented in Table 23. Each theme will be further described.

Table 23

Suggestions for Improving Current Ways of Giving Labour and Birth Information

Theme	Number	Percentage
Giving opportunities to ask questions	60	40.0
Giving detailed information about labour and birth	57	38.0
Using individual and group teaching	53	35.3
Using simple language	50	33.3
Organising manner of giving information	49	32.7
Not every mother is given labour and birth information at home	45	30.0
Information providers at home should take more time	39	26.0
Midwives should give emotional support	20	13.3

Giving opportunities to mothers to ask questions

Sixty mothers expressed that first time mothers should be given opportunities to ask questions to midwives during pregnancy and labour. The mothers felt that where information was being given by the midwife, no time was allowed for them to ask about issues specifically concerning them as individuals. The only time the midwives allowed mothers to ask questions was during a health education talk at the antenatal clinics but

this was dominated by mothers who had already given birth before. The fact that this was a mixed group of experienced and first time mothers made them feel shy to ask questions. Some mothers responded in this way:

During the health talk at the antenatal clinic, the midwives were teaching us various topics about childbirth. At the end of the sessions we were not given an opportunity to ask questions. (PN 22)

At one antenatal teaching session, the midwife gave us an opportunity to ask questions, but the experienced mothers took the opportunity to ask question based on their past experience and I could not follow the issues under discussion. I was shy to ask any questions. (PN 7)

### Giving detailed information about labour and birth

Fifty seven mothers suggested that first time mothers should be given detailed information about labour and birth. They further suggested that information providers should be very open with first time mothers. Mothers felt that they had been denied full information about labour and birth. They observed that there was emphasis on pregnancy and not on labour and birth. One mother said:

The information about labour and birth is not given in full. By the time I went in labour I did not know other things such as about how the after birth is delivered. I think it would have been good if the midwives told mothers about the whole process of labour.(PN 9)

### Using both individual and group teaching

Fifty three mothers felt that there should be emphasis on individual teaching and unmixed group teaching especially at antenatal clinics rather than only mixed group teaching. The unmixed group teaching would only comprise first time mothers while the mixed group could comprise experienced and first time mothers. The mothers suggested

that the midwife should take time to give information to the individual mother during physical assessments rather than using mixed group teaching sessions only. Mothers expressed the wish to have sessions where only first time mothers will be involved in group teaching. They still appreciated mixed group teaching because it gave them the opportunity to learn from mothers who have already gone through a childbirth experience. One mother stated that:

The midwives who were examining me were not talking to me and there was no explanation about what they were doing during physical assessment. It would be good if the midwives took the opportunity during the time they examine mothers to teach them about childbirth. (PN 51)

#### Using simple language when giving information

Fifty mothers felt that midwives were giving information using language they were not familiar with. If information is still given in a mixed group the midwife should use language that the first time mother will understand. Furthermore, the mothers felt sometimes midwives as well as traditional counsellors use frightening language. They also suggested that during labour the midwives should not shout at the mother when giving information. One mother described her experience as follows:

I always found the midwives using words I could not understand such as labour ward. I also found both midwives and traditional counsellors using threatening words such as “you will die” I think all this should not happen because first time mothers do not benefit from the teachings. (PN 3)

#### Labour and birth information at the clinic should be given in organised manner

Forty nine mothers suggested that giving of labour and birth information at the antenatal clinic should be properly organised so that mothers should attend the clinics during pregnancy and be assured to hear about labour and birth. They expressed the fear

that some mothers never hear anything from the midwives until they go for birthing and the only information they have is what they heard from home which sometimes is not adequate. Some mothers had this to say:

I went to the antenatal clinic four time but all I heard during health talks was about AIDS and anaemia in pregnancy. There was nothing said about actual birth. (PN 22)

I wonder how the topics which are covered during health talks at antenatal clinic are chosen. I heard the same topic for three times (PN 9)

### Midwives should not take it for granted that all mothers are given information at home

Forty five mothers expressed that usually during labour the midwives ask this:

“Were you not counselled at home?” The mothers suggested that midwives should not take it for granted that every first time mother is given information at home. One mother gave this suggestion:

Midwives should give information as if the mother was not given any information at home rather than thinking that every mother is given information at home. (PN 39)

### Information providers at home should take more time to give information

Mothers suggested that information providers at home should take much more time than they do to give information because they are more open and give detailed information. They should not assume that the mother will receive more information at the hospital. One mother had this to say:

I wish the people who give information at home took more time to give information because they give detailed information. They should give more than one session so that the first time mother should learn as much as possible because the midwives at the hospital do not give adequate information. (PN 9)

### Midwives should give emotional support

Thirty nine mothers suggested that midwives should give emotional support when giving information about labour and birth. The mothers said during their encounters with most midwives they did not find midwives caring and empathetic. The mothers explained that lack of empathy leads to increased anxiety. One woman said:

The midwife that assisted me to give birth was very rough. She was shouting at me. She was not giving any explanations about anything happening. I would like to suggest that midwives be more caring and understanding to all mothers during child birth. (PN 117)

### Summary

Mothers had suggestions for improving the current methods of giving information about childbirth particularly by midwives. Their suggestions mainly covered content and actual techniques for giving information and the behaviour of midwives during labour and birth.

### Summary of Chapter

This chapter presented findings from the responses to the open ended questions that mothers were asked in this study. Four main issues emerged from the findings. Firstly, mother were given various information about labour and birth at the hospital mostly by the midwives. The information at the hospital covered a wide range of labour and birth information topics but the emphasis was on the signs of onset of labour.

Secondly, there was a lot of labour and birth information given at home. This information was given by traditional counsellors, traditional birth attendants, female friends and relatives. The information mainly comprised of cultural beliefs, taboos and practices about labour and birth. Thirdly, mothers identified their own labour and birth

information needs. Some of the items identified were similar to what they had received but in some instances the topics were different. Their priorities in terms of what they needed to know was different from what was emphasised at the hospital and at home. Finally, mothers suggested ways of improving current methods of giving labour and birth information. Their suggestions were in relation to content as well as actual methods of giving information.

## CHAPTER SIX

### Discussion

In this descriptive-correctional study, labour and birth information given to first time mothers in Malawi was determined. Mothers' satisfaction with this information was also determined. Maternal perceptions of labour and birth information needs as well as informational and emotional support received were described. In addition, relationships between total information, overall satisfaction with information and selected variables were also determined.

### Summary of Findings

From this study, it is apparent that a first time mother in Malawi is likely to be an adolescent who is married and living with her husband. She would have a Christian affiliation. She would most likely be a house wife involved in subsistence farming, having only received a lower primary school education. During pregnancy, she would have started attending a hospital antenatal clinic in the second trimester of pregnancy and would visit the clinic three to four times prior to giving birth at the hospital.

The findings of the study indicate that first time mothers in Malawi receive labour and birth information both at the hospital and home. The information in the hospital is mainly given by midwives at the antenatal clinic and again during the labour and birth period. The midwives' information mainly focuses upon onset of labour, breathing techniques and expected behaviour for the mother. Information received at home is given by traditional counsellors, traditional birth attendants and female relatives. This information mainly comprises cultural beliefs and taboos about childbirth.

Of interest was the fact that no matter where mothers received labour and birth information, they were satisfied with the amount of information they received. Unfortunately very few mothers received information on most topics. Over half of the mothers were not satisfied with the amount of information they received in preparing them for labour and birth.

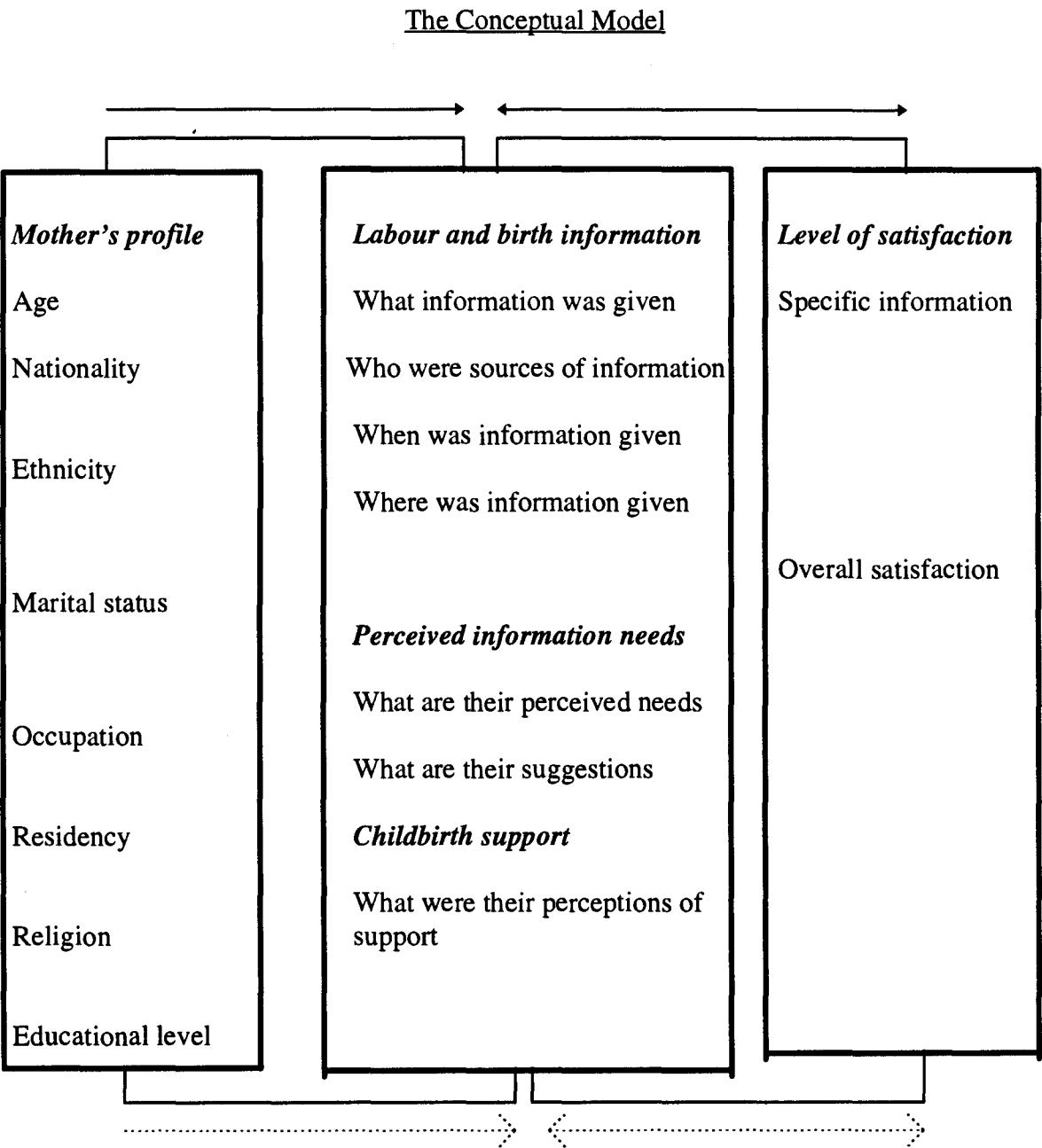
The first time mothers had their own perceptions of the labour and birth information they wished to receive such as the rights of the mother during labour and birth, the process of labour and admission procedures. The main sources of labour and birth information were the midwife and traditional counsellor/traditional birth attendants. Overall the mothers felt they did not receive adequate informational and emotional support from midwives but traditional helpers and family provided most of the support they needed.

Furthermore, there were positive relationships between the total information the mothers received and overall satisfaction with information; total information and professional source of information and overall satisfaction with information from health professionals. This meant the more information the mother received, the more satisfied she was with the labour and birth information she received in preparing her for labour and birth. In addition, the more information the mother received from health professionals like the midwives, the more total information she received about labour and birth. The mother was more satisfied with information she received from health professionals than from her family and traditional helpers.

Finally, the mothers suggested that midwives should allow more opportunities for first time mothers to ask questions during antenatal visits and during labour and birth. Furthermore, mothers felt that detailed information about the process of labour and birth should be given to them.



Chapter Six integrates and interprets the qualitative and quantitative findings presented in chapters Four and Five. The study was guided by a conceptual framework developed from the literature related to childbirth information needs and satisfaction with care. Interpretation of the findings will therefore be discussed in relation to the conceptual framework and literature. The conceptual framework had five constructs which further comprised several concepts. The constructs were: mother's profile; labour and birth information received; mothers perceived information needs, mothers' perception of informational and emotional support and the level of satisfaction with information (Figure 1). The chapter concludes with a summary of the strengths and limitations of this study.



**Figure 1.** Conceptual Model Underpinning the Study

Key:

- > indicates that studies have been done on impact of construct
- .....> indicates that studies have not been done in Malawi on impact of construct
- < indicates relationships demonstrated in previous studies
- .....< indicates unsupported relationships in Malawi

### Construct: Mother's profile

This section addresses the construct of the mother's profile and the group of concepts underpinning it. A profile of a typical subject followed by detailed discussion of the concepts will be presented.

#### Age and Nationality

The age at which women start child bearing is an important demographic and social indicator in any society. In this study although the age of the subjects ranged from 13 to 30 years the majority of the subjects were below 20 years of age. This finding presents important information in recognising that a first time mother in Malawi is likely to be an adolescent. It is important to note that this finding is supported by the findings of a Demographic and Health Survey conducted nation wide in 1992. In the survey, 1413 urban and 4393 rural households were randomly selected with 4849 eligible women being selected and interviewed. The results indicated that marriage and childbirth among Malawian women starts at an early age. The average age at first childbirth was 18.9 years (Malawi Demographic and Health Survey [MDH Survey], 1992). Therefore this study was representative.

There have been many studies done from developed countries on adolescent pregnancies and childbirth. Findings of such studies indicate that the mothers in this age group are at risk of many pregnancy, labour and postpartum complications. (Fleming 1990; O'Sullivan & Jacobsen 1992; Sarah, Hurrell & Towns 1995). The findings of the current study have implications for providing information to adolescent mothers which will meet their complex physical, psychological, and sociological needs during pregnancy, labour, birth and the postpartum period. It is

important for these adolescent mothers to be well informed about the process of pregnancy, labour and birth during pregnancy, so they can seek medical assistance should anything “out of the normal expected process” occurs. If they understand the “normal” they will be able to know when something is going wrong. Early reporting of the abnormal may assist to decrease the risks of morbidity and mortality that adolescent women face in Malawi.

The majority of the mothers (n =147) were of Malawian origin and the remainder were Mozambiquean. The Mozambiqueans were remnants of refugees from a previous tribal war and despite the repatriation that is still going on there are still some Mozambiqueans who have remained in Malawi for reasons such as inter marriage, employment and business (Situation Analysis of Poverty [SAP] in Malawi, 1993). Nationalities are of significance because cultural beliefs, taboos and attitudes towards health are influenced by the ethnicities in the nation. It is however important to note that the three Mozambiquan subjects in this study did not have any remarkable differences from the Malawian subjects in the variables that were measured.

### Ethnicity

Malawi's society is diverse and complex with its different ethnic, linguistic and cultural groups. Traditional beliefs, customs and taboos have a powerful influence on any society because they influence social relationships, decision making patterns, acceptability of new ideas and modern practices in the area of education, health, sanitation and family planning. The ethnic structure in Malawi has significant impact on the health of mothers especially regarding cultural beliefs, practices, taboos and decision making in childbirth. Traditionally, ethnic groups have different

ways of educating their young men and women in beliefs, taboos and practises pertaining to birth, marriage and death. Initiation in some ethnic groups encourages early marriage and child bearing which often prevents girls from regular school attendance and encourages dropping out of school (SAP in Malawi, 1993).

In this study the majority of the subjects (33.3%) belonged to the Lomwe tribe. The remainder belonged to the Chewa, Ngoni, Yao, Tumbuka and Sena tribes. This was an expected finding because in the districts where the study was done, these are the tribes which are found. Lomwes, Senas and Yaos originate from the southern part while the Chewas and Ngonis originate from the central part. The Tumbuka originate from the northern part of Malawi. There are nine major tribal groups in the country hence not all tribal groups are represented in this study (Malawi National Health Plan, 1986-1995).

#### Marital Status and Residency

The majority of the mothers (76.0%) were married although only 44.7% were living with their husbands. This discrepancy was probably due to travelling required since most husbands look for work in towns. The remainder were single, engaged, divorced or widowed and living with both parents, mothers, grandparents or alone.

Malawi's society is characterised by a patrilineal system in the northern part and in Chikwawa and Nsanje districts in the southern part. A matrilineal system exists in the central region and the remaining districts in the southern region. Each system has its own set of roles. After marriage the husband and wife are expected to live together but in some situations, the husband moves to the town or city in search of employment. The extended family therefore remains the main source of emotional and informational support to the mother whereas the man is seen as the main

financial provider. The findings of this study support findings of previous surveys (Malawian Population Policy, 1992; MDH Survey, 1992; SAP in Malawi, 1993) reflecting the marital and residency status of most Malawian women. The implications of this finding relate to information giving to first time mothers recognising the emotional and informational support they receive from the family. For example, there is a merit in the possibility of more involvement of the family especially during birth. At the present time none of the family members come to see the mother during labour in the hospital. It may be necessary to consider allowing at least one of the family members to be with the mother during labour and birth. This view is supported by previous studies investigating the role of support during childbirth (Beaton & Gupton, 1990; Jabunathan & Stewart, 1995; Percival, 1995; Tarkka & Paunomen, 1996).

### Occupation

The majority of the mothers were housewives, involved in subsistence farming, with the remainder involved in small scale business, domestic work, office cleaning, nursing aid, primary school teaching or office management. According to the SAP in Malawi (1993), the majority of the Malawians are involved in subsistence agricultural farming with very low incomes. Only a small proportion of the labour force is employed in the paid work force sector. Women are most affected by this problem because of their lower educational level. It could be concluded that the findings of this study apply to mothers with low socioeconomic status. The poor socioeconomic status that affects these women also has implications for childbirth. First time mothers should be provided with the necessary support and information in preparation for first childbirth experience particularly considering the fact that lack of

adequate financial resources limits the mothers' ability to access information and help.

### Religion

All mothers who were involved in this study had a religious affiliation with the majority (96.2%) being Christian. Religious beliefs have diverse effect on people's beliefs and customs. Some religious beliefs such as the Yao in Moslems encourage early marriage and childbirth (SAP in Malawi, 1992). However, since the majority of the mothers were Christian it can be assumed that the religion did not have any impact on the majority of the mothers involved in this study. The number of Yaos in the study was small, therefore could not be representative of the population.

### Educational Level

The majority of the mothers in this study (74.0%) attended lower primary school education, 6.0% had attended upper primary school education and only 1.3% had attended tertiary education (12.7% had never been to school). The MDH Survey (1992) found among the 4849 child bearing women who participated in the survey, 47.2% had no education at all, 24.6% attended lower primary school education (standard 1-4), 23.9% attended upper primary school education (standard 5-8), 4.4% attended secondary school and above. The findings of the current study reflect slightly higher educational levels than in the previous studies, however, it is apparent from the findings of the MDH Survey that the literacy level in Malawi is very low with more boys attending school than girls. There is also a higher school drop out rate among girls (12%) than among boys (6%). Approximately half the children who

enter school drop out before acquiring a permanent state of literacy. Therefore, only 39% of the adult population is able to read or write (SAP in Malawi, 1993).

The high level of illiteracy in Malawi may be attributed to ethnic and religious beliefs which discourage education and encourage early marriage and child bearing among girls. Another reason may be due to lack of financial resources such as school fees which is a common problem since 90% of Malawians are classified as poor. It is important to mention that charging of school fees was stopped in 1995 with the purpose of encouraging more school attendance especially among girls. There have also been projects introduced by the government to encourage girls to attend school such as Girls' Attainment in Basic Literacy Education (SAP in Malawi, 1993).

Educational level is an important factor in seeking information, understanding it and in appreciating information received. Understanding the importance of attending antenatal classes and accepting advice such as need for hospital birth among first time mothers in spite of other issues is strongly determined by the mother's educational level. This has implications for the preparation of the educational materials to be used in hospitals. There is need for midwives who give information to consider using teaching methods suitable for teaching mothers with minimal or no education. Information given must not require much reading and there should be use of pictures, diagrams and models in simple lay terms, one to one teaching and group teaching. The midwives should also take time to explain issues related to childbirth because if they teach at a fast rate the mothers will have problems assimilating what is being taught.

Although these mothers are young, they are adult learners therefore it is important that midwives giving information should observe all assumptions about



adult learners (Knowles, 1990). Some assumptions include the fact that adults learn more if they see the importance of the material being taught, they use past experience, they learn better from simple to complex and they learn better if they are involved in their learning. Midwives therefore need to consider emphasising the reasons for the mother to know the information being taught. Midwives also need to allow mothers to share their experiences concerning what they have heard or seen related to labour and birth. Although these mothers have not gone through labour and birth, they still have experiences that would benefit other mothers or have heard of other mothers' experiences and this would also enhance their participation. The teaching material should also proceed from simple to complex to allow better conceptualisation of the material being taught.

### Summary

Since this study's profile of the first time mother in Malawi so closely represents that of a first time mother in Malawi according the MDH Survey (1992) and Malawi National Population Policy (1992), the findings can confidently be generalised to first time mothers in Malawi.

### Construct: Labour and Birth Information

In this section, the construct "Labour and Birth Information" will be discussed. The concepts which underpin this construct include: what information the first time mothers received; who gave them the information; where they received the information and when they received the information (Figure 1).

### What labour and birth information the first time mothers received at the hospital

In order to fully explore this concept, the first time mothers were firstly asked: “What labour and birth information were you given at a hospital?” Overall the mothers’ responses were clustered into four themes. The majority of the mothers (74.4%) stated that they were given labour and birth information about the onset of labour. Other subthemes which were identified by between one third and half the mothers were: bearing down during birth (43.3%) and preparation for labour and birth (40.0%). Subthemes that were identified by less than one third of the mothers were: lying positions during labour and birth (27.3%); crying during labour (24.0%); cooperating with midwives during labour (20.7%) and breathing exercises in labour (16.7%). Less than 10% of the mothers identified subthemes such as: what could go wrong during labour and birth (7.3%); what to eat during labour and birth (6.7%); how the progress of labour is monitored (6.0%); how the actual birth occurs (5.3%); assistance that can be given to the mother during labour and birth (5.3%); initial breast feeding (3.3%); the effect of taking traditional medicine during labour and birth; the process of labour (2.2%); the need for exercises and rest in preparation for labour and birth (2.2%) and the importance of hospital birth (2.2%). Of great concern was the finding that 9.3% stated that they were not given any specific information about labour and birth.

In order to validate the findings the mothers were further asked to respond to a list of items by choosing one out of four response categories indicating the amount of information received. There were distinct similarities between the responses to the open ended question and the closed ended question. In this section, information on the onset of labour had the highest scores with the majority of the mothers (86.7%) stating that they received this information. In contrast, more mothers (71.3%) stated

that they were given information about breathing exercises in labour; what is expected of the mother during labour and birth (54.0%); the assistance that can be given during labour and birth (38.6%) and the initial breast feeding (34.0%).

Similar to the responses to the open ended questions, most of the remaining items scored very low indicating that most mothers did not get any labour and birth information regarding these items: the physiological changes in labour (25.3%); physical needs of the mother during labour (16.6%); the emotional needs of the mother during labour and birth (21.3%); how the midwife monitors labour (20.0%); use of medications during labour (4.0%); what could go wrong with the mother during labour and birth (25.3%); what could go wrong with the baby during labour and birth (24.0%); the reasons for giving assistance to the mother during labour and birth (22.7%); pain relief in labour (6.0%); the initial baby care by the midwife during birth (12.0%); the looks of the newborn (4.0%); the capabilities of the newborn (5.4%); the rights during labour and birth (0.7%) and the options during labour and birth (0.7%).

There are several issues originating from these results which are of interest. Firstly, it was very clear that using both qualitative and quantitative methods of data collection helped to reduce recall bias. The responses indicate that when the mothers responded to the first open ended question there were responses which were forgotten but when asked the same question using a closed ended question, they were able to remember. This emphasises the need for triangulation in data collection (Morse, 1991).

Secondly, it was clear from the results of this study that only one aspect of labour and birth information: 'onset of labour' received great emphasis from information providers of labour and birth information particularly midwives. The

remainder of labour and birth information received little or no attention at all. Furthermore, only one mother received information on ethical issues such as the rights and options that the mother has during labour and birth.

Thirdly, these findings are of great importance because they show lack of consistency in giving labour and birth information to first time mothers in preparation for labour and birth.

These findings are supported by other studies. A study by Bester and Nolte (1992) in Johannesburg in South Africa found that primigravidae had insufficient knowledge of childbirth and this was due to poor attendance at the antenatal clinic and inadequate professional counselling. The results of their study indicated that a large gap existed in the primigravidae's preparation for labour and birth. Other studies have also reinforced the need for mothers to be adequately prepared for labour and birth by providing essential information (Beaton, 1990; Flessig, 1993; McIntosh, 1988; Halldorsdottottir & Karlsdottir, 1996; Walker, Hall & Thomas, 1995).

There are several implications for the findings of this study. Firstly, there is an obligation to reorganise antenatal, labour and birth activities in Malawi particularly the manner in which information is given to mothers. There is a definite need to have a policy on the content of information given to mothers during pregnancy, labour and birth so that physiological, psychological, social and ethical information needs are covered. This may require reorganisation starting from the top level with policy makers in the Ministry of Health in Malawi.

Secondly, these results have implications for nurse/midwifery educators in the schools of nursing and midwifery as well as other health professionals and staff development educators in the clinical area. There is a necessity to make students and

staff aware of labour and birth information needs and to ensure that adequate information is given to first time mothers. Health professionals such as midwives should use every opportunity available either during health education talks at the antenatal clinic and antenatal ward or when they see the individual mothers during the antenatal clinic visit or in the antenatal ward to give as much labour and birth information particularly to first time mothers. The antenatal period is a more ideal time to deliver information compared to labour and birth period when staffing levels are relatively low. Qualified nurses and other staff who deal with first time mothers need to go through refresher courses to remind them of the information needs of first time mothers, strategies of giving information and who is the most appropriate person to give it.

#### What labour and birth information the first time mother received at home

The mothers were also asked the question: "What labour and birth information were you given at home?" In contrast with information given at the hospital, the information given at home mainly focussed on cultural beliefs, myths and taboos about labour and birth. Themes identified from mothers responses' to this question focussed on what the mother was expected to do or not do to ensure an uncomplicated birth.

It is apparent from the themes which identified in this study that some of the information given to the mothers was helpful to the mother although the rationale may have been questionable. For example, during labour the mother was allowed to walk around when she was able to. Medically, it is believed that ambulation encourages the progress of labour (Beischer, Mackay & Purcal, 1989). The cultural

rationale for walking about during labour was to prevent the baby from delaying its birth because it will be idle and lazy during the birth process.

Some of the labour and birth information given had potential to cause maternal anxiety. For example, mothers were told to avoid sitting or standing at a door because the baby would stop at the birth pathway and would not descend to be born. Field notes taken indicated that some midwives encouraged the belief in traditional information. One mother told a story of a midwife at an antenatal visit who told her to move away from a door where she was standing. The midwife asked the mother whether she had been given information at home about standing or sitting at a door. Life is full of walking through different types of doors and this could be very difficult for the mother to comply with. If the mother then experienced prolonged labour she may believe that her behaviour attributed to this. Another example was having a sneak look through a window or door during pregnancy. Culturally, it is believed that such a behaviour can lead to prolonged labour as the baby will be appearing and disappearing at the birth pathway during birth. However, such a behaviour is difficult to avoid because sometimes one has to do this before they open the door for safety reasons and such a belief could put the mother and her partner at risk because they would be forced to open doors before checking who was outside. Overall, while not directly harmful, this kind of information may cause anxiety.

Furthermore, some of the information given may have been harmful to the mother such as the use of traditional medicine called 'mwanamphepo.' The strength and composition of the drug is not known, unless a scientific study is done on the drug, it is difficult to advocate use of the drug. Experience shows that some mothers who are believed to have drunk the drug end up having precipitate labour and

ruptured uterus. The mothers were also advised to stop having sex as early as 5-7 months during pregnancy because it is believed that the baby could be born with “whitish stuff” around its body which is considered a disgrace to the society. Loss of intimacy may cause difficulty in the relationship and perhaps lead husbands into sleeping with other partners. This is a particularly high risk behaviour which may further contribute to the problem of AIDS which is on the increase in Malawi.

The findings of the study are similar to the findings of a study by St. Claire and Anderson (1989) who found in their study of 145 post partum mothers that household members, relatives and friends gave information to the mothers. Most of the advice given was sound but often rationale for recommended health action was poorly understood. Some mothers received advice that, if followed, would be harmful to their health. The results suggested that for some low-income women, social networks serve as important resources of health information. However, the information given may cause unnecessary worries or conflict with advice given by health professionals.

There are several implications for the findings of this study. Firstly, there is an obligation for cultural labour and birth information to be incorporated in midwifery practise. Midwives need to be aware of the content of labour and birth information given at home and its impact on the mothers. Unsafe practices need to be discouraged but other practices which are not harmful can be left because they do not cause any known negative effects on the mother. Sometimes health professionals fall into the trap of thinking every traditional belief or act is evil. There is a requirement to maintain “cultural sensitivity” (Leininger, 1978). In addition, knowing the content of traditional information may help midwives to avoid asking mothers why they behave as if they had not been counselled at all at home because

some mothers expressed that this was a common question asked by midwives during labour and birth.

Secondly, there is urgency to incorporate labour and birth information in the curriculum of midwifery education so that students should be fully aware of the content of labour and birth information given at home. This will assist them to learn giving cultural sensitive care to mothers particularly those having their first childbirth experience.

Thirdly, these results indicate urgency for conducting research into some of the traditional practises and their effects on child birth such as use of the traditional medicine 'mwanamphepo' and use of 'nkhata' and mtondo' for bearing down during childbirth. Unless such studies are done, there is no basis for discouraging mothers from the use of these practices. Study of the practices in a scientific manner may prove them to be effective in which case they could be adopted for use elsewhere.

There is also a requirement to do further research on traditional counselling. This study's findings are based on the mother's perception of labour and birth information given, labour and birth information needs and perception of the support they received in preparation for labour and birth. The necessity to consider the provider's perspective of the issues particularly midwives, traditional birth attendants and traditional counsellors is evident.

This study was not done in the northern part of Malawi, therefore it may be necessary to explore the information that is given in that region bearing in mind that there are diverse cultural differences between the people of this region and those of the southern and central regions where study took place.



### Providers of labour and birth information

The mothers were asked to respond using a four point scale to indicate the amount of information they received from various sources of information. The scale ranged from 'None' to 'A Lot of Information'. The midwife was seen as the major source of information (82.7%); the traditional counsellor and traditional birth attendant were second (59.3%) and friends were third (52.0%). Other sources of information were: mother; aunt; grandmother; doctor/clinical officer; sister and mass media. Three main sources of information emerged: the family source comprising all relatives and friends; the professional source comprising midwife, doctor/clinical officer and mass media and the traditional folk comprising traditional birth attendants and traditional counsellors. When this grouping is used, the family becomes the source of most information. Furthermore, Doctors/clinical officers and mass media were the least used sources of information.

The findings of this study are supported by a recent study done by Tarkka & Paunonen (1996) who interviewed 200 volunteers from Tampere University Hospital in Finland. The results revealed family members such as a spouse or partner, parents, siblings, friends and neighbours as the most informational support persons for the mothers. Although professional workers were cited after the family, their information was considered to be more important than that of the family. Other studies have also found the similar findings (Beaton & Gupton, 1990; Gagnon & Waghorn, 1996; Pascoe & French, 1990; St. Clair & Anderson, 1989).

The results of this study indicate that the family of the mother is the major source of information outside of the hospital setting. The midwives and traditional helpers are the other sources of information. However, the midwife is considered to be the major source of information in the hospital. This means that the midwife

needs to be well prepared for the role of an educator to first time mothers during pregnancy, labour and birth. There is an urgency to examine the midwifery education in Malawi to discover if student midwives are well prepared for this role. The results of this study also reinforce the necessity for practicing midwives to participate in in-service programmes through the staff development programmes in the hospital to ensure they know how to impart knowledge to mothers, particularly those who are expecting their first baby.

The fact that mass media was cited least in providing information is valuable because midwives and government policy makers will know that this method of providing labour and birth information should not be relied upon. However, there is an exigency to research the use of media in giving labour and birth information to find out the availability of mass media such as radio and literature and how useful they are. This can assist in developing practical and effective ways of using mass media in giving labour and birth information to a smaller population in Malawi which can afford and are able to use this method to receive information.

There is moreover, compulsion to explore why doctors and clinical officers did not give much information. The medical curriculum may require review to see if patient education, particularly for child bearing mothers is incorporated. If it is not, there will be an obligation to incorporate patient education because these doctors see mothers at different stages during childbirth and they need to be equipped with skills for giving information to mothers. Practising doctors and clinical officers may likewise have to attend staff development programmes to remind and teach them about the importance of giving information to mothers particularly those having their first birth experience.

There is also urgency to strengthen existing training programmes for traditional birth attendants to include traditional counsellors and teach them about essential information they need to include in their traditional counselling sessions. It is also necessary to address issues related to traditional information and practices which may make the mothers at risk such as reporting to hospital in advanced labour as a sign of being brave.

Finally, there is a need for further research into sources of labour and birth information to explore the knowledge, attitudes, beliefs and practises of the providers of information. This will help to identify their learning needs and hence assist in organising their educational programmes.

#### Where and when the mothers received the information

The concepts of where and when mothers received information in the conceptual framework comprised information about antenatal care clinic attendance and place of birthing.

Antenatal Clinic Attendance. It was reported from the Malawi Demographic Healthy Survey (1992) that in 9 out of 10 births, mothers receive antenatal care from a hospital setting and this care is given by a trained midwife, trained clinical officer or in some circumstances a doctor. Women who received antenatal care from a traditional birth attendant accounted for less than 1% of the births and those who did not receive antenatal care accounted for 7% of the births. In contrast, the findings of this study indicate 92.0% mothers attended antenatal clinic at a hospital, 6.0% attended a traditional birth attendants clinic while 2.0% did not attend antenatal clinic during pregnancy. This study found a greater number of mothers who attended antenatal care at a traditional birth attendant's clinic and a lesser number of women

who did not attend the clinic at all than in the previous demographic survey. However it should be borne in mind that these findings only reflect clinic attendance and not the type and quality of antenatal care given at these clinics.

It is interesting to note that the majority of the mothers (68.0%) started attending antenatal clinic during the second trimester of pregnancy and they attended three to four times (77.4%). This indicates that mothers started attending antenatal clinic late according to recommended practice from health professionals, therefore, they may have missed some of the activities offered at antenatal clinics.

Antenatal clinic attendance is a very important aspect of childbirth care because this is the opportunity for mother to be given physical, psychological and sociological preparation for labour and birth. In Malawi it is recommended that antenatal visits be made on monthly basis to the 28th week of gestation, fortnightly to the 36th week of gestation and weekly until the 40th week of gestation. If the first antenatal visit is made at the third month of pregnancy, the optimum schedule translates to a total of at least 12 -13 visits (Malawi National Health Plan 1986-1995).

However the findings of this study emphasises under-utilisation of antenatal clinic care in Malawi. One of the possible explanations for low utilisation could be the low educational level of the mothers. Previous studies indicate a close relationship between lower maternal education and antenatal clinic attendance (Frede, 1982; Jacoby, 1988; Malawi Demographic and Healthy Survey, 1992; Malawi Population Policy, 1993; Malawi Poverty Situation Analysis, 1993; Perry, 1995). Other possible explanations could be traditional beliefs as culturally early attendance of antenatal care clinic is discouraged because it is believed that one can lose the pregnancy. Other mothers started attending antenatal clinic in third trimester

to ensure that during birth at the hospital they would not be asked why they did not attend antenatal care clinic. In other words, they did not really want to attend antenatal care clinic but did so only to avoid conflicts with the midwives during labour regarding having not attended antenatal care clinic.

Socioeconomic status is also closely related to antenatal clinic attendance. Previous research studies have shown a positive relationship between low socioeconomic status and poor utilisation of antenatal clinics (Field, 1990; Jacoby, 1988; Malawi Demographic and Healthy Survey, 1992; Shearer, 1993). Other variables influencing antenatal care attendance have not been explored in this study such as access to the clinics, interest in antenatal care, scheduling problems and previous attendance (Frede, 1982; Lindell, 1988).

It is apparent from the mothers' profile in this study that there is poor attendance at antenatal clinics. The mothers attend only a few times or start antenatal care late in the pregnancy. Lack of understanding of the benefits of antenatal care could also be attributed to their lack of getting adequate coverage of labour and birth information.

Place of Birthing. In Malawi, because of increased maternal and infant morbidity and mortality rates, it was decided to increase the proportion of babies being born at hospitals. All first time mothers; previous mothers who have had experiences of complications such as haemorrhage, difficult labour and birth, preeclampsia and eclampsia, neonatal deaths and those mothers with underlying medical complications are expected to give birth in a hospital setting (Malawi National Health Plan, 1986-1995). Previous surveys in Malawi have shown that mothers who visited health professionals in hospitals during pregnancy are more

likely to deliver at a health facility than those who did not make such contact (Malawi Population Policy, 1992; MDH Survey, 1992).

In this study, it is stimulating to note that although the majority of these first time mothers (92.6%) gave birth at a hospital, 6.7% gave birth at a traditional birth attendant's clinic and 0.7% gave birth at home. In Malawi, births that occur at home are assisted by female relatives or a trained or untrained traditional birth attendant. In a hospital setting they are more likely to be assisted by a trained midwife or a clinical officer or doctor should complications occur.

Place of birthing has an impact on the information given during birthing and also in the type of support the mothers receive from the family and care givers. It is however, worth acknowledging that there is a strong relationship between the mother's educational status and the choice of place of birthing. The findings of the MDH Survey (1992) indicate the proportion of births delivered in a health facility increases from 45% among women with no education to 91% among women with secondary school education or higher. Other influences in the choice of place of birthing could be ethnic and religious beliefs. More important is the fact that in some ethnic groups, the decisions about childbirth are not left to the mother or the spouse. The uncle of the woman makes the decisions about anything including childbirth issues such as place of birth. It is likely that with some of the mothers who gave birth at home, the decision may have been made by their uncles.

It is worthy to mention that there are other variables which influence women's choice of place of birthing which were not within the scope of this study such as what they have heard about the places of birthing, knowledge about options about birthing places, and choice of care giver during birth (Crotty, Ramsat & Smart, 1990; Green, Kitzinger & Coupland, 1990; O'Callaghan, 1995).

### Summary of construct

In this construct, the mothers' perspective of information received at home and hospital were discussed. Information given at the hospital focussed on onset of labour and there was little or no attention given to other labour and birth information. Information given at home was based on traditional beliefs, myths and practices related to childbirth. The information given at home can be classified into three categories: potentially anxiety producing, harmful and not harmful. Midwifery care in Malawi needs to address these impacts. In addition, this construct addressed where and when the mothers received information and the providers of information. Mothers received information at an antenatal clinic, hospital or at home during traditional counselling sessions. There was evidence that mothers antenatal clinic attendance was poor and since there was inadequate human resources, information given in the hospital during birth was inadequate. There were three main sources of information: professional, family and traditional. Mothers received a lot of information from family and traditional sources compared to professional sources but they valued more information from professionals. Under professional sources, doctors and mass media were the least used sources of information.

### Construct: Perceived Information Needs

#### Mothers' Perceived Information Needs

The mothers were asked the open-ended question: "What labour and birth information would you have liked to know?" During pregnancy, mothers develop expectations of everything concerning the anticipated labour and birth. These expectations play an important role in determining mothers' responses to the childbirth experience (Spitzer, 1988). Mothers identified the following topics as

information they would have liked to know: rights and options during labour and birth; the process of labour and birth; admission procedure for a woman in labour; what could go wrong during labour and birth; indications for interventions during labour and birth, the nature of labour pains and pain relieving measures available.

Other studies support the findings of this study. The content of childbirth information identified by these studies include: anatomy and physiology of the reproductive system, normal labour and delivery process, caesarean birth, labour and birth drugs and their effects, relaxation and breathing techniques (Avery & Olson, 1987; O'Brien-Pallas, 1992); pain and pain relief, normal progress of labour and roles of woman in labour (Hallgren, Kihlgren & Norberg 1994); pain and pain relief (Green, 1993); coping with the stress of labour (Maloney, 1995; Simkin, 1991); labour and delivery, breathing and relaxation, maternity tour, hospital procedures and legal information (Mollart, 1995); stages of labour (Jacoby, 1988).

Knowing mothers' labour and birth information needs is vital for planning antenatal, labour and birth education to mothers. In Malawi, it is important that a new educational programme for first time mothers be developed which will include the needs which they have identified. This also means that when the midwives see the mothers they should ask them what they wish to know. Staff development planners therefore need to consider mothers identified needs and ensure that they are covered during in-service sessions for the midwives. Replication of this study with a larger sample may be necessary to ensure that all maternal information needs have been identified. Other needs may have been missed because of the limited size of the sample involved in this study.



### Suggestions for Improving Current Methods of Giving Information

The mothers were asked the question: Do you have any suggestions for improving the current methods of giving labour and birth information? In response, the mothers identified several issues which focussed on the actual methods of giving labour and birth information and on the content of the information. Themes were identified from the responses and these included: giving the mothers opportunities to ask questions; giving detailed information about labour and birth; use of individual and group teaching; use of simple language; organising the manner of giving information; taking more time to give information at home and giving emotional support.

This insight was very important and has to be taken into consideration when planning the educational programmes for first time mothers. During staff development sessions midwives should be reminded of these issues. Student midwives have also to be made aware of this during their midwifery education. Some of the issues raised have to be addressed at policy making level such as organising the manner of giving information so that a mother does not go through the whole antenatal period without hearing anything about labour and birth. This may be achieved by reorganising the antenatal activities and making sure that all aspects of pregnancy, labour and birth as well as postpartum care are addressed. For example, specific classes on the whole child birth process could be covered during different health education talks which can be held concurrently during health education talks by midwives. Mothers can then be allowed to choose the class they want to attend based upon their individual needs. The organisers should ensure that all aspects of childbirth are covered over a period of time rather than having all mothers attend one health education session. In terms of staffing this is possible because there are one to

ten midwives available during an antenatal session. The number varies from clinic to clinic and it depends on availability of human resources. This suggestion may not be viable in clinics where one midwife conducts the antenatal clinic session.

The traditional information providers should also be made aware of what the mothers want. They may not be able to assist in all areas but this would be beneficial in two areas: taking more time to give information and giving emotional support to the mothers.

### Summary of Construct

In this construct, mothers identified their informational needs. Their priorities were information on rights and options during labour and birth, the process of labour and birth and admission of a woman during labour. It is important that content of labour and birth information incorporates what mothers think they need to know. This information is essential for developing educational programmes for first time mothers. In addition, some of the suggestions mothers gave included the following: they should be given opportunities to ask questions during information giving sessions, there should be use of simple language by midwives when giving information and there should be use of individual and group teachings.

### Construct: Childbirth Support

In response to the question of the mothers' perception of the informational and emotional support the mothers received from the midwives and traditional folk and family, the mothers indicated that they received more support from the traditional counsellor and traditional birth attendant or family than from the midwives. They however, reported receiving helpful suggestions from midwives. The mothers found it easier to ask questions to the traditional helpers and family than to the midwives.

Of great concern was the fact that mothers found information they received from the midwives, and traditional helpers and family to be conflicting.

Childbirth support is a very crucial aspect of labour and birth care. Previous studies have revealed that adequate childbirth support results in: decreased use of analgesia during labour, less likelihood of having an episiotomy, and improved personal control during childbirth (Hodnett & Osborn, 1989); more positive experience of childbirth, shorter duration of labour and positive attitude towards labour (Koeske & Koeske, 1990; Pascoe & French, 1990) and an increased satisfaction with the childbirth experience (Higgins, Murray & Williams, 1994; Jambunathan & Stewart, 1995; McNiven, Hodnett & O'Brien-Pallas, 1992).

Giving adequate informational and emotional support to first time mothers is part of childbirth care. Therefore the results of this study emphasises the exigency for midwives to be aware of the need to give the mothers the support they need. Staff development educators must include content on giving emotional and informational support in their curriculum to remind the midwives and traditional birth attendant/counsellors of their role in giving informational and emotional support to mothers. The importance of informational and emotional support must be stressed in midwifery education so that midwifery students are taught how to give support to first time mothers. It is also important to acknowledge the fact that the family does give support and that their involvement should be encouraged.

There is a necessity for research to be conducted on the specific aspects of support that is given by traditional helpers and family members because no studies have been done in this area in Malawi. This would provide baseline data for developing new educational strategies to address the needs not only of the mothers but their family networks.

### Summary of Construct

Informational and emotional support is an important aspect of childbirth care. In this study mothers felt they did not get much support from midwives. Family members and traditional helpers were recognised as giving more support. There is a requirement to strengthen the provision of informational and emotional support to mothers. This can be approached through education of midwives, staff development programmes for practicing staff and change of some policies at government level such as having guidelines for patient education to be used in hospitals.

### Construct: Level of Satisfaction

#### Satisfaction with individual topics

The mothers were asked to rate their satisfaction level with individual labour and birth information. It is interesting to note that the majority of the mothers who were given information were satisfied with the information they were given. The only problem identified was the fact that few mothers actually received information therefore although they were satisfied, this would not be representative of the whole population. For example, of the 130 mothers who were given information about onset of labour, 80.8% were satisfied but this was the only topic that had this high number of mothers receiving information. Of the 38 mothers who were given information about physical changes in labour 70.2% were satisfied. Of the 25 mothers who were given information about physical needs of the mother in labour, 84.0% were satisfied with the information they received. This trend was true for items in this section. This meant that if mothers had been given information about each particular topic, they were likely to have been satisfied with the information they received.

### Overall satisfaction with the information the mother received in preparing her for labour and birth

Over half of the mothers (51.3%) expressed overall dissatisfaction with the amount of labour and birth information they received in preparing them for labour and birth. This result was not amazing because mothers did not get balanced information about physical, psychological, sociological and ethical information regarding labour and birth.

Research studies conducted on satisfaction with care indicates that patients are satisfied with care when they receive adequate information. The results emphasise the urgency to strengthen information giving to mothers particularly those having their first childbirth experience in order to increase their satisfaction level with maternity care (Alexander et al., 1993; Brown, 1994; Higgins et al., 1994; Jacoby, 1988; Kerssens, 1994).

### Summary of Construct

Patient satisfaction with care is believed to be one aspect of measuring quality of care. In this study mothers were asked to rate their satisfaction with individual labour and birth information items they received. In addition, they were also asked to rate their overall satisfaction with the total labour and birth information they received in preparing them for labour and birth. Generally mothers were satisfied with individual labour and birth information topics. As only a few of them had actually received the information, this was not representative of the whole population. Overall, over half of the mothers were dissatisfied with information received in preparing them for labour and birth. This was an expected outcome because they did

not receive adequate information on physical, psychological, sociological and ethical aspects of labour and birth information.

### Relationships Between Overall Satisfaction with Information and Selected Variables

Relationships among selected variables were sought. First, the relationship between total amount of labour and birth information the mother received and her overall satisfaction with the information in preparing her for labour and birth was determined. The results revealed a significant positive relationship, indicating that the more information the mother received, the more satisfied she was with the information. Studies by Bond and Thomas (1994); Brown and Lumley (1994); Seguin, Therrien, Champagne & Larouche (1989); Windor-Richards and Gillies (1988) support the findings of this study. The more information the mother gets, the more satisfied she will be with the information as well as the whole maternity care.

Second, the results indicated that there was a significant positive relationship between overall satisfaction and the amount of information the mother received from professional sources. This is interesting because although the mothers got more information from family sources and traditional folks, they were more satisfied with information they received from professional staff such as midwives. This result is supported by a recent study by Halldorsdottottir & Karsdottir (1996) and Tarkka & Paunonen (1996).

Third, the results indicated a positive relationship between overall satisfaction and family source of information although it is not as strong as the relationship with a professional source of information. This supports the role of the family in providing informational support to mothers (St. Claire, & Anderson, 1989).

Fourth, there was a positive relationship between the overall satisfaction of the mother and the gestation at which the mother started attending the antenatal clinic indicating that the earlier in pregnancy she started attending antenatal clinic, the more satisfied she was. This may have been due to the fact that she may have made more visits and possibly received more information than if she had started late in pregnancy (Nicholas, 1995; Perry, 1995; Petitti et al., 1990).

Fifth, there was a weak relationship between age of the mother and overall satisfaction with information indicating that the older the mother, the more satisfied she was. The magnitude of the slope was small. The number of subjects in the older group may have accounted for this finding. Brown & Lumley (1994) in their study of 790 Australian women found that there was no association between satisfaction of the mothers and their ages.

Finally, there were negative relationships between the overall satisfaction and the number of visits the mother made to the antenatal clinic and educational level of the mother. These results are startling because they indicate that the number of visits the mother made to the antenatal clinic was not influenced by the level of her education.

The results further indicated that the level of education did not positively influence satisfaction therefore, the more educated the mother was, the less satisfied she was. This could be so because the more educated the mother is, the more aware she may be of what she needs to know. The fact educational level does not influence satisfaction is similar to results of a previous study which found that educational level does not influence satisfaction (Seguin et al., 1989). In contrast, Higgins et al (1994) and Brown & Lumley (1994) found that educational level influenced satisfaction. It is however important to note that the number of mothers with higher

education was very small in this study therefore this presented difficulties in interpreting the findings of this study.

The findings on overall satisfaction with information, sources of information, gestation of the mother, age of the mother, number of visits made to the clinic and educational level of the mother are very important for midwifery practise, education and research in Malawi. The results indicate mothers were not given adequate labour and birth information however, where information was given, they were satisfied with the information they received. Therefore there is a need to strengthen the way information is given by ensuring adequate coverage of all labour and birth information because the more information the mother receives, the more satisfied she will be. Furthermore, there is an obligation to ensure more professional involvement in giving information because mothers were more satisfied with information they received from professionals. In addition, there is also a necessity to have much more family involvement in the provision of labour and birth information. Finding ways of achieving higher satisfaction among mothers by addressing the issues of visits made is significant. The findings suggest more research is required to explore factors that influence the mothers' satisfaction with information about labour and birth in order to improve the current practice.

Patient satisfaction with care is of considerable concern to health professionals because it is one indicator of quality of care (Everrit, 1995; Munro, Jacobsen & Brooten, 1994). In Malawi no studies on satisfaction have been carried before. There is therefore urgency for researchers in Malawi to consider doing more research in this area. This will provide data on quality of care being given to first time mothers.



### Relationships Between Total Information Received and Selected Variables.

First, the relationship between total information and amount of professional source of information was positive and significant indicating that the more information the mother received from professional staff, particularly midwives, the more total information they received about labour and birth. Other previous studies indicate that mothers value information given by midwives or other health professionals more than information from family members. This finding is supported by findings of studies by St. Claire et al. (1989) and Tarrka & Paunonen (1996).

Second, there was also a positive significant relationship between the amount of total labour and birth information the mother received and the amount of information she received from the family members (Hodnett & Osborn, 1989; Tarrka & Paunonen, 1996; Simkin, 1991; St. Claire et al, 1989). The findings revealed that mothers received more information about labour and birth from family members.

Third, there were also significant positive relationships between the amount of total labour and birth information received and the following: educational level of the mother; gestation when she started attending antenatal clinic and age of the mother. The more educated the mother was, the more information she received possibly because of her ability to understand issues. This finding supports the results of the MDH Survey (1992) and SAP in Malawi (1992) which indicted that the more educated the mother was the more aware she was of her health information needs. The earlier the mother started attending antenatal clinic, the more information she received. It is anticipated that the mother will be more informed about childbirth issues if she attends antenatal care at an early stage during pregnancy (Nicholas, 1995; Petitti et al, 1990; Perry, 1992). The older the mother, the more information she received was another finding. This could have been due to the fact that the

mother was exposed to different information during her pre-pregnant state and when she got pregnant. She would have been possibly married and mature enough to seek information, however, the opposite could be true that a young mother would seek more information knowing that she does not know much about life experiences because of her age (MDH Survey, 1992; Malawi Population Policy, 1992).

Fourth, there was a negative relationship between the total labour and birth information the mother received and the number of visits made to the antenatal clinic. This result is of great concern because it indicates that even though the mother made more visits to the clinic, she did not receive more information. This could be one of the reasons why there is under-utilisation of antenatal clinics. Perhaps experienced mothers share their experiences with the first mothers about the fact that there is not much they can hear at the antenatal clinic about labour and birth. Previous studies in Malawi and elsewhere suggest that this could be one of the reasons why there is under-utilisation of antenatal care clinics (MDH Survey, 1992; Nicholas, 1995; Petitti et al 1990; SAP in Malawi, 1993).

#### Summary of Discussion on Correlations Among Selected Variables

It is clear from this study that satisfaction with information is influenced by many factors. However, this study has established that in Malawi, mothers want more information about labour and birth which would positively influence their satisfaction. The mothers want more information from professionals such as midwives. The mothers' educational level influence the total amount of information received. Age does not seem to influence satisfaction with information.

### Discussion of Post-hoc Factor Analysis Results

Factor analysis is a statistical grouping technique which reduces large sets of variables into single concepts to simplify the understanding of the subject matter. More often, factor analysis is performed as an exploratory technique to summarise the structure of a set of variables. It is also performed to validate an instrument with the purpose of constructing a reliable test (Tabachnick & Fidell, 1989). In this study factor analysis was conducted on the amount of labour and birth information to identify any potential divisions of twenty variables (Burns & Grove, 1993). These variables were measuring the amount of labour and birth information. The items consisted of physical, psychological, sociological, and ethical aspects of labour and birth information. It was hoped that factor analysis would identify these four constructs. However, out of the twenty items, seven factors were identified and only variables with eigenvalues of  $>1$  were included. Two factors had four variables or more loaded on them and the remainder had nil to three simple or complex variables. For interpretation of factors, only factor one and two were considered because there were closer relationships between variables.

Variables under factor one were: "Reasons for medical help given to the mother during labour and birth"; "What could go wrong with the mother during labour and birth"; "Medical assistance that can be give to the mother during labour and birth"; "Use of medications during labour and birth" and "How the midwife monitors labour". "What could go wrong with the baby" was a complex variable which also loaded on factor two. Variables which loaded on factor two included: "What could go wrong with the baby"; "Initial baby care; Emotional needs of the mother" and "How the newborn baby looks".

Item characteristics clustered under factor one appeared to describe one theme thus “the mother’s aspect of labour and birth information needs.” Item characteristics clustered under factor two appeared to describe another theme thus “the baby’s aspect of labour and birth information needs.”

These results indicate that the items on the instrument had addressed mainly what were the mother’s and baby’s aspects of care. There is evidence that the other aspects like ethical, psychological or sociological aspects of labour and birth information are not equally represented as physical aspects. However the difficulty in interpreting the other variables requires further analysis of the instrument which will be performed at a later stage in order refine the instrument for future use. There is also need for replication of the study to further explore whether the instrument covers all concepts which underpin the construct “content of labour and birth information.”

#### Summary of Discussion of Post-Hoc Results

Factor analysis done on the instrument measuring the amount of labour and birth information revealed seven factors but only two could be interpreted. The necessity for further analysis of this part of the instrument is important and will be carried out at a later stage in order to establish if this instrument tested all aspects of the labour and birth information construct. Further analysis may promote the use of the instrument in future.

### Strengths of the Study

1. For the first time in Malawi, labour and birth information needs of first time mothers and satisfaction with information were explored providing baseline data for improving current methods for providing information.
2. The data collection methods used both qualitative and quantitative methods which ensured triangulation thereby strengthening the quality of data collected.
3. There was a high response rate of 95.5% from the mothers. Demographics confirmed previous population studies carried out in Malawi. Therefore, the results are generalisable in central and southern parts of Malawi.
4. The data collection instrument was developed to suit the socioeconomic, cultural and educational perspectives of the mothers.
5. The instrument went through validity and reliability testing before its use.

### Limitations of the Study

1. Participants in this study were from two regions in Malawi which makes it difficult to generalise the findings to the third region which was not involved in the study.
2. Some of the interviews were done when mothers were still in hospital and this could have influenced their responses because of fear of the midwives who took care of them.
3. For mothers who were interviewed after six weeks, there was a possibility of recall bias.

## CHAPTER SEVEN

### Conclusion, Implications and Recommendations

#### Conclusion

The findings of this study are of great importance because they describe the current status quo of how and what labour and birth information is given to first time mothers in Malawi. The first time mother in Malawi is likely to be an adolescent with a low literacy level and low socio-economic status. Her antenatal attendance will be poor and she is more likely to give birth at a hospital. This means that if this mother is going to benefit from the teaching that is given on childbirth particularly by midwives, there is need to look at ways of motivating her to attend antenatal care clinics from the first trimester of pregnancy. There is also a need to reorganise the antenatal care to accommodate the problems of low antenatal clinic attendance by ensuring that the mothers are given as much information as possible during their limited visits. The high staff-patient ratio in labour wards in the hospital during labour makes it impossible to rely on staff to give all wanted information in labour.

It can also be concluded that labour and birth information given at the hospital is mainly given by the midwife. The emphasis is on the signs of the onset of labour and all other labour and birth information receives little or even no attention such as rights of the mother during labour. Furthermore the mother may go through the whole antenatal period without receiving information about labour and birth from the midwife. Some aspects of the information are given in labour and not during pregnancy such as breathing and relaxation techniques. In summary, the first time mother in Malawi does not receive adequate labour and birth information from the midwife.

Labour and birth information at home is mainly given by traditional counsellors/traditional birth attendants or the family members and usually comprises beliefs, myths and taboos concerning childbirth. Some of this information has the potential to be harmful if followed. Some of it is not harmful but may potentially cause stress on the mother because she may be threatened that if she does or does not do something she or the baby may die. Finally, some of the information is beneficial although the rationale given is not scientifically true. No studies have been done to investigate some of the practices such as use of traditional medicine called 'mwanamphepo.'

First time mothers in Malawi have their own perceived labour and birth information needs which if considered during planning of educational programmes could help to increase their satisfaction level with information. Priority areas identified by the mothers are: rights of the mother, the process of labour and birth and the admission procedure of a woman in labour.

First time mothers in Malawi are not satisfied with the amount of labour and birth information they are given. The results revealed that the more information they received on individual items of labour and birth information, the more satisfied they were. Overall, they were not satisfied with all the information they received in preparing them for labour and birth. There was a positive relationship between the amount of labour and birth information and satisfaction with information.

### Implications

This study's findings have implications for nursing/midwifery practice, education, management, and research. Information giving is an important component of care for child bearing mothers, particularly first time mothers. Childbirth is a major developmental task which requires physical, psychological, and sociological adjustment. Nurses and midwives in practice, administration and research have a responsibility of ensuring that mothers have positive childbirth experiences. Providing adequate labour and birth information is one of the important aspects of care that are necessary to be addressed to achieve positive childbirth experiences for mothers.

#### Implications for Practice

The implications of this study for nursing/midwifery practice are based on the conceptual framework. In the construct of the mother's profile, some of the characteristics, can not be changed such as the ethnic group, nationality or religion but nurses and midwives can use opportunities they have during school health visits to encourage girls to continue with school and postpone marriage and child bearing until they finish school. This may be helpful in reducing adolescent pregnancies as well as ensuring a more educated community. A better educated community may be more receptive to teaching of importance of antenatal care. The practitioners can also encourage antenatal care visits by being friendly to the mothers and explaining the importance of antenatal visits.

There is also need to reorganise the content of health talks given at antenatal clinic so that all areas of childbirth: antenatal, labour, birth and postpartum are covered. Mothers should be asked what their perceived needs are so these can be



included in the content. The way the content is given should consider the educational level of the mothers, thus the use of simple non medical language, pictures and group discussion to allow sharing of ideas may be necessary.

Labour and birth midwives should try where possible to provide information which they find lacking in the mothers instead of getting impatient with their knowledge level. They should be friendly and allow the mothers to ask questions.

Nurses and midwives should be supportive to the mothers throughout the antenatal, labour, birth and postpartum period. The mothers in this study expressed that they felt the midwives were not supportive. There is also a requirement to consider involving the family more by allowing at least one member of the family to come to the labour ward even if she does not stay all the time. The results of this study and other studies indicate that the family is a major source of support (Beaton & Gupton, 1990; Higgins et al, 1994; Hodnett & Osborn, 1989; St. Clair & Anderson, 1989).

Traditional birth attendants and counsellors should continue their good work of giving information to the mothers and they should take more time when giving information as mothers suggested. The areas of their care that need attention can be addressed through staff development programmes.

In practice, for all these to occur in Malawi, there is an exigency to reorganise the current human and material resources. This may require getting additional resources and/or developing different creative strategies to effectively use the available resources. For example, first time mothers and experienced mothers can attend different classes at least some of the time where there is more than one midwife conducting the antenatal care. First time mothers in this study indicated that they did not feel free to ask questions in the presence of experienced mothers.

Separating them may assist to reduce this problem. In addition, literature suggests that first time mothers have different childbirth information needs than experienced mothers (Copeland, 1979; Freda et al, 1993; Mollart, 1995; Schneider, 1984;. The strategy of having separate classes may assist to address first time mothers needs and yet avoid repeating information to experienced mothers. Experienced mothers can be allowed to listen to some of the topics if they felt they lacked the information.

### Implications for Education

Nursing Education. In the schools of nursing and midwifery, there is need to ensure that students are well prepared for the role of patient educators and counsellors. This means that student should also be given opportunities to practise giving antenatal teaching sessions to first time and experienced mothers during training. In the midwifery curriculum, there should be inclusion of labour and birth content to be given to first time mothers because unless the students exactly know what they are supposed to teach they may not give the most appropriate information. This calls for an obligation to review the current midwifery curriculum for nurses and midwives in Malawi and to ensure that the needs of first time mothers and experienced mothers are addressed as different entities. Furthermore the students have to be oriented to the content of labour and birth information given at home so that they are made aware of what the mother may have been taught. This could be done by inviting traditional counsellors/traditional birth attendants to give a lecture to the students on the content they teach first time mothers and how they do it.

Staff Development. In-service staff development should be offered to nurses and midwives who deal with child bearing mothers to address the issue of content of labour and birth information and childbirth support. The midwives who are in

practice may not have learnt about the special information needs of first time mothers and appropriate teaching strategies to cover these. Even issues such as information given at home by traditional counsellors and traditional birth attendants could be covered during these sessions.

There is also a need for refresher courses on these issues for nurses and midwives who have been in the clinical area for sometime. They may have forgotten some important aspects of patient education and may require to update their knowledge on current issues.

Workshops would be another strategy of getting across mothers' concerns about the way midwives give information. The results of this study and other studies of this nature could be shared with other health professionals through workshops.

Traditional birth attendants are currently being traced and trained so that their performance can be more productive. This needs to continue and since there are issues that have been raised through this study, it may be necessary to include this aspect in their staff development sessions.

The cadre of traditional counsellors (alangizi) who may not be traditional birth attendants has been neglected in Malawi. Therefore, there may be a compulsion to start having training sessions for them as they have a major influence on mothers because of the information they give them.

### Implications for Management

There are many areas where management might effect change to improve the current methods of giving information to first time mothers. Policy makers in the ministry of health in Malawi may need to review policies regarding the operation of antenatal care services. Introducing childbirth classes particularly for first time

mothers may be a major area for change. It may also be necessary to consider a policy which will affect the way the antenatal activities are carried out. For example, instead of having one health talk sessions, there could be concurrent health talk sessions. Mothers can choose which one they wish to attend. Another possibility is to have separate classes for first time mothers and experienced mothers. In that way first time mothers would be given opportunities to receive new information each visit and decide which session would be helpful for them. There is also a need to have a policy on the content of information to be given to mothers particularly first mothers to ensure that each clinic provides consistent content. Allowing each clinic to teach what they consider feasible or allowing each midwife to teach what she considers important on the day may lead to inconsistency in information as well as poor coverage of all aspects of childbirth care.

A recruitment process however, may be have to be considered if these strategies to be easily implemented. There is evidence that there is high patient-staff ratio in Malawi (Malawi National Health Plan 1986-1995). The Ministry of Health in Malawi may have to consider employing more nurses and midwives to ensure that information provision occurs effectively.

There may also be other material resources which are not adequate within the hospitals such as infrastructure. On the long term basis the ministry may have to consider soliciting funds to reconstruct some of the antenatal clinics which do not have room for different classes to held at the same time.

### Implications for Research

This was the first study in Malawi to look at first time mothers labour and birth information needs. There is need to replicate this study and to also cover the northern part of Malawi which was not included in the current study. There is also a requirement to look at the provider's perspective of the situation. The midwives and traditional helpers must be studied to find out their knowledge, attitude and beliefs about childbirth information.

Further work on the instrument used in this study should be done to refine the instrument and make it more valid and reliable. The instrument can be used for further studies to address the issues of information provision to mothers and their satisfaction with information in future.

Specific studies on traditional practices such as use of 'mwanamphepo,' 'nkhata' and 'mtondo' to explore their effectiveness would provide essential information regarding these practices. These practices may still be common in Malawi, particularly in rural areas although mothers may not reveal this. Researching them may give basis for modifying them, plus for encouraging or discouraging people from using them.

The need to conduct more research on sources of information is crucial because the results indicated that mass media and doctors were not common sources of information. Although there is only a small number of doctors in Malawi, it is still important to explore their involvement in patient teaching. A school of medicine has been opened in Malawi and baseline information can be used to strengthen their curriculum. The issue of mass media must be explored to make sure that every available resource for giving information is used to the maximum.

Childbirth support in Malawi is mainly provided by the family and the traditional counsellors/traditional birth attendants. Further research is required to explore the nature of support given and to get more baseline data for improving current involvement of these people in giving support to mothers. At the moment little is known.

In this study, mothers identified their own labour and birth information needs. Further research can assist to get more information regarding what first time mothers want to know about labour and birth. Using a larger sample would be one strategy for achieving this.

This study was also the first in Malawi to determine patient satisfaction with care. The responses given by mothers emphasise the need to conduct more research on satisfaction with different aspects of maternity care. This will help to determine the quality of maternity care given to mothers.

### Summary of Recommendations

On the basis of this study's results, it is recommended that:

1. Nursing/midwifery curriculum should address labour and birth information needs of first time mothers by including content identified as desirable by first time mothers.
2. Nurse/midwifery curriculum should incorporate content of childbirth education that is given at home by traditional folk and family.
3. Traditional counsellors and birth attendants should undergo training to ensure that they give safe information to first time mothers.
4. Policy makers in the Ministry of Health in Malawi should consider changing the organisation of antenatal care activities by introducing childbirth education classes

for first time mothers and ensuring that all clinics have the same guideline for the content to be given particularly to first time mothers.

5. Schools of midwifery should educate more midwives so that there will be more midwives who can be employed by the ministry of health and private hospitals.

6. Recruitment of more midwives should be considered at ministerial level to ensure that clinics and wards are well staffed.

7. Research should be done to replicate this study to cover the northern region of Malawi.

8. Research should be done to explore the effectiveness of traditional practices such as the use of: 'mwanamphepo,' 'nkhata' and 'mtondo.'

9. Staff development for practising nurses and midwives should be conducted at hospital and national level to discuss content of childbirth education to first time mothers and other issues of concern such as informational and emotional support and satisfaction with care.

10. There should be collaboration and better communication between midwives and traditional birth attendants/traditional counsellors. This can be done through frequent meetings between the groups. These meetings can be arranged by community health workers and district development committees.

## References

- Alexander, L., Candridge, J. & Moore, L. (1993). Patient satisfaction: An outcome measure of maternity services. Journal of Prenatal Nursing, 7(2), 28-39.
- Avery, P., & Olson, I. (1987). Expanding the scope of childbirth education to meet needs of hospitalized, high-risk clients. Journal of Obstetric & Gynecological and Neonatal Nursing, 418-420.
- Bachman, J. (1993). Self-described learning needs of pregnant teen participants in an innovative university/community partnership. Maternal-child Nursing Journal, 21(2), 65-71.
- Beaton, J. (1990). Dimensions of nurse and patient role in labour. Health Care of Women International Inc., 3, 98-108.
- Beaton, J. & Gupton, (1990). Childbirth expectations: A qualitative analysis. Midwifery, 6, 133-139.
- Beischer, N.A., Mackay, E.V. & Purcal, N.K. (1989). Care of the pregnant woman and her baby. (2nd.ed.). Sydney: Saunders/Brailiere Trindall.
- Bester, M. & Nolte, A. (1992). Knowledge and expectations of childbirth in primigravidas. Curationis, 15(4), 12-15.
- Black, D. (1986). Schoolgirl mothers. British Medical Journal, 2, 293-295.
- Bond, S. & Thomas, L. (1992). Measuring patients' satisfaction with nursing care. Journal of Advanced Nursing, 17, 52-63.
- Bramadat, I. & Driedger, M. (1993). Satisfaction with childbirth: Theories and methods of measurement. Birth, 20(1), 42-48.
- Brook, C. (1995). Support during child bearing. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 77-81.



Brown, S. & Lumley, J. (1994). Satisfaction with labour and birth: A survey of 790 Australian women. Birth, 21(1), 4-12.

Bryanton, J., Fraser-Davey, H. & Sullivan, P. (1983). Women's perceptions of nursing support during labour. Journal of Obstetric & Gynaecologic and Neonatal Nursing, 8, 638-644.

Burns, N. & Grove, S. (1993) The practice of nursing research: Conduct, critique and utilisation. (2nd. ed.). Philadelphia: W.B. Saunders.

Bryar, R. (1988). Midwifery and models of care. Midwifery, 4, 111-117.

Cartwright, A.(1987). Monitoring maternity services by postal questionnaires to mothers. Health Trends 19: 19-20.

Coakes, S., & Steed, L. (1996). SPSS for Windows: Analysis without Anguish. Brisbane: John Wiley & Sons.

Copeland, D. (1979). Unwed adolescent primigravidas Identify subject matter for prenatal classes. Journal of Obstetric & Gynaecological and Neonatal Nursing.

Cottrell, B. & Grubbs, L. (1994). Women's satisfaction with couplet care nursing compared to traditional postpartum care with rooming-in. Research in Nursing and Health, 17, 401-409.

Creedy, D.K. (1995). Women's experience of childbirth: Trauma vs. personal competence. Proceedings of the Australian College Of Midwives Inc. 9th Biennial Conference, Sydney, Australia, 125-132.

Crotty, M., Ramsat, A. & Smart, R. (1990). Planned homebirths in South Australia 1976-1986. Medical Journal of Australia, 303, 1517-1519.

Crowe, K. & Baeyer, C. (1989). Predictors of a positive childbirth experience. Birth, 16(2), 59-63.

Dimond M. & Jones, S. (1983). Social support: A review and theoretical intergration. In Chinn P, (ed.). Advances in Nursing Theory Development. Rockville: Aspen, 235-249.

Downe-Wamboldt, B. (1992). Content analysis method, application and issues. Health Care for Women International, 13, 313-321.

Driedger, M. (1993). Being there: The key factor in satisfaction with childbirth? Proceedings of the 23rd International Congress of the International Confederation of Midwives, Vancouver, Canada, 606-620.

Eriksen, I.R. (1987). Patient satisfaction: An indicator of nursing care quality? Nursing Management, 18(7), 31-35.

Everrit, L. (1995). Maternity customer satisfaction: Involving customers in creating change. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 175-182.

Field, A. (1990). Effectiveness and efficiency of antenatal care. Midwifery, 6, 215-223.

Fiscella, K. (1995). Does prenatal care improve birth outcomes? A critical review. Obstretic, Gynecologic, 85, 468-479.

Flemming, S. (1990). Adolescent pregnancy in Australia: Perspectives and problems. Modern Medicine of Australia, 5, 64-72.

Flessig, A. (1993). Are women given enough information by staff during labour and delivery? Midwifery, 9, 70-75.

Freda, M., Anderson, F., Damus, K., & Merkatz, I. (1993). What pregnant women want to know: A comparison of client and providers' perceptions. Journal of Obstetric & Gynecologic and Neonatal Nursing, 22(8), 237-243.

- Frede, V. (1982). Childbirth education programmes: A study of woman participants and non-participants.' Birth, 9(3), 183-185.
- Fridh, G. & Gaston-Johansson, F. (1990). Do primiparas and multiparas have realistic expectations of labour? Acta Obstretica et Gynacologica Scandinavica, 69, 103-109.
- Friedman, E. (1986). What do consumers really want? Health Care Forum, 29, 20.
- Gagnon, A. & Waghorn, K. (1996). Supportive care by maternity nurses: A work sampling study in an intrapartum unit. Birth, 23(1), 1-6.
- Gardner, M., Cliver, S., McNeal, S. & Goldenberg, R. (1996). Ethnicity and sources of prenatal care: Findings from a national survey. Birth, 23 (2), 84-87.
- Goodman, J. & Abernathy, J. (1989). Prenatal Classes: A comparison of attendees and non-attendees. Proceedings from the American Nurses' Association International Nursing Conference, Arlington, VA.
- Gould, R. (1995). Finding the path through the methodology maze towards an understanding of women's birthing experiences. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 201-204.
- Grant, J.P. (1995). The State of the World's Children. UNICEF. Geneva: Oxford University Press.
- Green, J. (1993). Expectations and experiences of pain in labour: Findings from a large perspective study. Birth, 20(2), 65-72.
- Green, J., Coupland, V. & Kitzinger, J. (1990). Expectations, experiences and psychological outcomes of childbirth: A prospective study of 825 women. Birth, 17(1), 15-24.

Green, J., Kitzinger, J. & Coupeland, V. (1990). Stereotypes of child bearing women: A look at the evidence. Midwifery, 6, 125-132.

Halloway, I. & Bluff, R. (1994). They know best: Women's perceptions of midwifery care during labour and birth. Midwifery, 10, 157-164.

Hallgren, A., Kihlgren, M. & Norberg, A. (1994). A descriptive study of childbirth education provided by midwives in Sweden. Midwifery, 10, 215-224.

Handler, A., Raube, K., Michele, A. & Grachello, A. (1996). Women's satisfaction with prenatal care settings: A focus group study. Birth, 23(1), 31-36.

Halldorsdottir, S., & Karlsdottir, S. (1996). Journeying through labour and delivery: Perceptions of women who have given birth. Midwifery, 12, 48-61.

Henderson, A.D. & Brouse (1991). The experiences of new fathers during first 3 weeks of life. Journal of Advanced Nursing, 16, 293-298.

Hetherington, S.A. (1990). A controlled study of the effect of prepared childbirth classes on Obstetric outcome. Birth, 17, 86-90.

Higgins, P., Murray, M. & Williams, E. (1994). Self-esteem, social support, and satisfaction differences in women with adequate and inadequate prenatal care. Birth, 21(1), 26-32.

Hillan, E.M. (1992). Issues in delivery of midwifery care. Journal of Advanced Nursing, 17, 274-278.

Hodnett, G. & Osborn, R. (1989). A randomized trial of the effects of monitrice support during labour: Mothers' views two to four weeks postpartum. Birth, 16(4), 177-183.

Jacoby, A. (1988). Mothers' views about information and advice on pregnancy and childbirth: Findings from a national study. Midwifery, 4, 103-110.

Jambunathan, J. & Stewart, S. (1995). Among women in Wisconsin: What are their concerns in pregnancy and childbirth. Birth, 22(4), 204-209.

Kerssens, J.J. (1994). Patient satisfaction with home-birth care in the Netherlands. Journal of Advanced Nursing, 20, 344-350.

Klaus, M., Kennel, J., Robertson, S. & Sosa, R. (1986). Effects of social support during parturition on maternal-infant morbidity. British Medical Journal, 293, 585-587.

Knowles, M. (1990). The adult learner: A neglected species. (4th ed.). Houston: Gulf Publishing.

Koeske, G. & Koeske, R. (1990). The buffering effect of social support on parental stress. American Journal of Orthopsychiatry, 60, 440-451.

Kojo-Austin, H., Malin, M. & Hemminki, E. (1993). Women's satisfaction with maternity health care services in Finland. Social Science and Medicine, 37 (5), 633-638.

Kwast, B. (1991). Maternal mortality: The magnitude and causes. Midwifery, 7, 4-7.

Kwast, B. (1992). Obstructed labour: Its contribution to maternal mortality, Midwifery, 8, 3-7.

Kwast, B. (1993). Safe motherhood -the first decade. Midwifery, 9, 105-123.

La Monica, L., Obsert, M., Madea, A. & Wolf, R. (1986). Development of a patient satisfaction scale. Research in Nursing and Health, 9, 43-50.

Laitinen, P. (1994). Elderly patients' and their informal caregivers' perceptions of care given: The study-control ward design. Journal of Advanced Nursing, 20, 71-76.

- Lamprell, K. (Ed.). (1991). Birth stories: A collection of personal experiences. North Ryde, NSW: Harper Collins.
- Leininger, M. (1978). Transcultural Nursing: Concepts, theories and practices. New York: John Wiley & Sons.
- Lindell, S. (1988). Education for Childbirth: A time for change. Journal of Obstetric & Gynaecological and Neonatal Nursing, 17(2), 108-112.
- Locker, D. & Dunt, P. (1978). Theoretical and methodological issues in sociological studies of consumer satisfaction with medical care. Social Science Medical Journal, 12, 283-292.
- Lumley, J. (1988). Assessing satisfaction with childbirth. Birth, 12(3), 141-145.
- Lumley, J. & Brown, S. (1993). Attendees and non-attendees at childbirth education classes in Australia: How do they and their births differ. Birth, 20(3), 123-129.
- Lynn, M. (1986). Determination and quantification of content validity. Nursing Research, 35(6), 382-385.
- Macintyre, S. (1981). Expectations and experiences of first pregnancy. University of Aberdeen. Occasional paper No.5.
- Mackay, M.C. (1990). Women's preparation for the birth experience. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia.
- Maclean, G.D. (1993). Education aspects of giving midwifery care for the 1990s. Midwifery Chronicle & Nursing Notes, 3, 72-77.
- Malawi Demographic and Health Survey (1992). Zomba: National Statistics Office, Malawi.

Malawi National Health Plan (1976-1995). Lilongwe: Ministry of Health.

Malawi.

Malawi National Population Policy (1992). Zomba: National Statistics Office.

Malawi.

Maloney, R. (1985). Childbirth education classes: Expectant parents' expectations. Journal of Obstetric & Gynecologic and Neonatal Nursing, 245-248.

McIntosh, J. (1988). Women's views of communication during labor and delivery. Midwifery, 4, 166-170.

McKay, S. & Yager Smith, S. (1993). "What are they talking about? Is something wrong?" Information sharing during the second stage of labour. Birth, 20(3), 142-147.

McNiven, P., Hodnett, E. & O'Brien-Pallas, L. (1992). Supporting women in labour: A work sampling study of the activities of labour and delivery nurses. Birth, 19(1), 3-8.

Mercer, R. (1985). Relationship of the birth experience to later mothering behaviours. Journal of Nurse Midwifery, 30, 204-211.

Mollart, L. (1995). Pregnant teenagers antenatal education research. Australian College of Midwives Incorporated, 26-28.

Moore, M. & Hopper, U. (1995). Do birth plans empower women? Evaluation of a hospital birth plan. Birth, 21(1), 29-35.

Morse, J. (1991). Qualitative Nursing Research (rev. ed.). Newbury Park: Sage Publication.

Morrison, J. & McRae, S. (1989). Adolescent pregnancy: An innovative model of care. Paper Presented at the International Midwives Association Conference, Adelaide.

Munro, B., Jacobsen, B. & Brooten, D. (1994). Psychometric characteristics of the La Monica-Obser patient satisfaction scale. Research in Nursing and Health.

Nicholas, M. (1995). Adjustment to new parenthood! Attendees versus non-attendees at prenatal education classes. Birth, 22(1), 21-25.

Norbeck, J.S., Lindsey, A.M. & Carrieri, V.L. (1981). The development of an instrument to measure social support. Nurse Research, 30(5), 264-269.

Oakley, A. (1979). Becoming a mother. Martin Robertson, Oxford.

O'Brien-Pallas, L. (1992). Monitoring maternity services by postal questionnaire to mothers, Health Trends, 19, 19-20.

O'Callaghan, S. (1995). Women's knowledge of their birthing options. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 341-343.

O'Sullivan, A. & Jacobsen, B. (1992). A randomised trial of a health care programme for first time adolescent mothers and their infants. Nursing research, 41, (4), 210-215.

Palkovitz, R. (1987). Father's motives for birth attendance. Maternal Child Nursing, 16, 123-129.

Pascoe, J.M. & French, J. (1990). The reliability and validity of maternal social support index for primiparous mothers: A brief report. Family medicine, 22(3), 228-230.

Percival, P. (1995). Transition to parenthood: How midwives can help new parents. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia.

Perry, M. (1992). Prenatal education: How effective is it? Australian College of Midwives Inc., 3, 15-20.



Petitti, D., Coleman, C., Binsacca, D. & Allen, B. (1990). Early prenatal care in urban black and white women. Birth, 17(1), 1-5.

Price, P. (1995). Do midwives really provide choices for women. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 363-370.

Polit, D. & Hungler, B. (1995). Nursing research: Principles and methods. Philadelphia: J.B. Lippincott Company.

Rogers, C., & Schiff, M. (1996). Early versus late prenatal care in New Mexico: Barriers and motivators. Birth, 23(1), 26-29.

Sarah, R., Hurrell, E. & Towns, S. (1995). Adolescent mothers: The development of a unique model of service delivery. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 419-423.

Schneider, Z. (1984). Becoming a patient: The experiences of primiparae. The Australian Journal of Advanced Nursing, 1(3), 16-26.

Seguin, L., Therrien, R., Champagne, F., & Larouche, D. (1989). The components of women's satisfaction with maternity care. Birth, 16(3), 109-113.

Shearer, M. (1993). Effects of prenatal classes can not be measured by obstetric management. Birth, 20, 130-131.

Shearman, R. (1989). Maternity services in New South Wales: Final report of the ministerial task force on obstetric services in New South Wales. Sydney, New South Wales Department of Health.

Simkin, P. (1991). Just another day as a woman's life? Part 1. Women's long term perceptions of their first birth experience. Birth, 18(4), 203-211.

Simkin, P. (1992). Just another day in a woman's life? Part II: Nature and consistency of women's long-term memories of their first birth experiences. Birth, 19(2), 64-81.

Situation Analysis of Poverty in Malawi (1993). The Ministry of Women and Children's Affairs and Community Services, United Nations Children's Fund and United Nations Nations Development Programme. Lilongwe.

Spitzer, R. (1988). Meeting consumer expectations. Nursing Administration Quarterly, 12(3), 31-39.

St. Clair, P. & Anderson, N. (1989). Social network advice during pregnancy: Myths, Misinformation and sound cancel. Birth, 16(3), 103-107.

Sullivan, D. & Beeman, R. (1982). Satisfaction with maternity care: A matter of communication and choice. Medical Care, 10(3), 321-330.

Tabachnick, B. & Fidell, L. (1989). Using multivariate statistics (2nd ed.). New York: Harper Collins Publishers.

Tarkka, M., & Pavnonen, M. (1996). Social support and its impact on mothers' experiences of childbirth. Journal of Advanced Nursing, 23, 70-75.

Timberlake, B., Fox, R., Baisch M., & Goldenberg, B. (1987). Prenatal education for pregnant adolescents. Journal of School Health, 57(3), 105-108.

Turnbull, C. (1984). Quality antenatal care? The Australian Journal of Advanced Nursing, 2(1), 32-43.

Waldenström, U., & Nilsson, C. (1993). Women's satisfaction with birth centre care: A randomized, controlled study. Birth, 20(1), 3-12.

Walker, J., Hall, S. & Thomas, M. (1995). The experience of labour: A perspective from those receiving care in a midwife-led unit. Midwifery, 11, 120-129.

Whelan, A. (1995). Birthing options study. Proceedings of the Australian College of Midwives Inc. 9th Biennial Conference. Sydney, Australia, 528-535.

Windor-Richards, K. & Gillies, P. (1988). Racial grouping and women's experience of giving birth. Midwifery, 4, 171-176.

## **Appendix A**

### **Background of Malawi**

### Geographical Structure

Malawi is a land locked country in central-southern Africa. It is bordered to the north and north east by Tanzania, to the east, south and south west by Mozambique and to the west by Zambia. The country has an estimated population of ten million and is divided into three administrative regions. The country has twenty four geographically demarcated districts.

### Demographic Trends

Malawi is a densely populated country with an estimated population of 10 million in 1992 and it was projected to reach 12 million by the end of the decade (Malawi Population Policy, 1992). It is believed that 87 persons live per square kilometre and 171 persons per square kilometre of arable land. In Malawi, fertility is very high and on average a woman will give birth to an average of 6.7 children during her life time. In rural areas, the total fertility rate is 6.9 children per woman compared to 5.5 children in urban areas. A woman's fertility is highly correlated with her level of education. The average age at which a woman first gives birth has risen slightly over the last decade from 18 to 19 years but over one third of women aged between 13 and 15 years have already given birth to one child or are currently pregnant. Crude birth rate and death rates are 53.6 and 20.9 respectively. Life expectancy at birth for women is 45 while for men, it is 55 (Malawi National Demographic Survey, 1992).

### Political and Social System

For nearly 30 years, Malawi was a one party system with a dictatorship form of government. In 1995, the form of government changed to a multiparty system with democracy. In spite of the presence of the government, the people of Malawi are characterised by strong cultural social networks with chiefs as the leaders in all communities. There are also different cultural groups in the country and each group

determines the traditional norms, beliefs and practices of each particular ethnic group. There are nine main ethnic groups with over 20 languages but there is one common national language called Chichewa which nearly all Malawians speak and understand.

### Economical Situation

Malawi is classified as one of the least developed countries in the world. With an estimated Gross Domestic Product (GDP) per Capita of \$230 in 1991, it ranks among the 15 poorest countries in the world. Small scale agriculture sustains over three quarters of the population. Budgetary expenditure on social services including health, education and social welfare are relatively low compared to other sub-saharan countries (Situation Analysis of Poverty in Malawi, 1993).

### Education

In Malawi, Illiteracy is very high with a very low proportion of the adult population able to write and or read. There have always been lack of human and material resources to be utilised in the schools. For some people, there are no schools within easy reach making it difficult for the young children to start school at an early age. Charging of school fees was a common practice until 1995 and this discouraged parents from sending children to school. Usually parents preferred sending their sons to school and left girls at home, promoting early marriage. There are government efforts at the moment which focus on encouraging girls to go to school (Malawi Population Policy, 1992 and Situation Analysis of Poverty in Malawi, 1993).

## Health Issues

Health services in Malawi are provided by the Ministry of Health and Mission hospitals. The Ministry of Health is responsible for planning and developing health policies and providing health care in all hospitals. The health status of the Malawian people is very low with high incidence of illness and death. Infant mortality rate is 134 per 1000 births. Under five mortality rate is 234 per 1000 births and maternal mortality is at 620 per 10,000 births (Malawi Demographic and Health Survey, 1992). Common diseases causing morbidity and mortality among infants and children are malaria, respiratory infections, diarrhoeal diseases, anaemia and malnutrition. Morbidity and mortality among mothers is caused by anaemia, malnutrition, haemorrhage, infections, obstructed labour and preeclampsia. The rate of immunisation among children is moderately low although there have been massive campaigns for immunisation which have had a positive impact. Family planning services are also available but according to the Malawi Demographic and Health Survey (1992), only seven percent of married women used these services. The usage among other groups of women was also low. AIDS is the leading cause of deaths among the 20-40 years age group. The government has taken an aggressive educational campaign against this epidemic.

**Appendix B**

**A group of mothers attending a health talk in the antenatal ward**





**Appendix C**

**Instrument for data collection**

### **INSTRUMENT FOR DATA COLLECTION**

Thank you very much for agreeing to be involved in this study. I have several questions to ask you. Feel free to share your opinions and at any point during the interview if you do not understand anything feel free to ask for further explanation. I will be writing down the responses you are going to give on your behalf.

#### **SECTION A**

First of all I am going to ask you questions concerning labour and delivery information you were given during the prenatal period and birth.

(a) During pregnancy and labour, what information were you given the hospital about labour and birth?

(b) During pregnancy and labour, what information were you given at home about labour and birth?



- (c) Please tell me any other information that you would have liked to know about labour and birth.

(d) Now I am going to ask you about firstly how much information you might have been given about the following, and secondly, how satisfied you were with the information you were given.

	<b>Responses</b>					<b>Responses</b>			
	1= None Given					1= Extremely Dissatisfied			
	2= Some Information					2= Dissatisfied			
	3= More Information					3= Satisfied			
	4= A lot of Information					4= Extremely Satisfied			
1. How to know that labour is starting	1	2	3	4		1	2	3	4
2. What physical changes occur to the mother during labour	1	2	3	4		1	2	3	4
3. The physical needs of the mother during labour?	1	2	3	4		1	2	3	4
4. The emotional needs of the mother during labour	2	3	4		1	2	3	4	
5. How the midwife can tell that you are progressing in labour	1	2	3	4		1	2	3	4
6. Use of medications during labour such as antibiotics	1	2	3	4		1	2	3	4
7. What could go wrong with the mother during labour	1	2	3	4		1	2	3	4
8. What could go wrong with the the baby during labour	1	2	3	4		1	2	3	4



**Responses**

1= None Given

2= Some Information

3= More Information

4= A lot of Information

18. Your options during labour  
labour and birth

1      2      3      4

19. What is expected of the mother  
during labour

1      2      3      4

20. Cultural beliefs and taboos  
about labour and birth

1      2      3      4

**Responses**

1= Extremely Dissatisfied

2= Dissatisfied

3= Satisfied

4= Extremely Satisfied

1      2      3      4

1      2      3      4

1      2      3      4

**SECTION B**

(a) The following statements explain about some of the support you may have been given by midwives and traditional counsellors. Think about your pregnancy, labour and birth as you respond to the following statements. Choose one word among the four that are given to describe how much you agree or disagree with each one.

**Responses**

1= Strongly Agree

2= Agree

3= Disagree

4= Strongly Disagree

1. My concerns and worries were attended to	1	2	3	4
2. I felt free to ask questions to midwives	1	2	3	4
3. I felt free to ask questions to traditional counsellors	1	2	3	4
4. I was given consistent information between the midwife and the traditional counsellor	1	2	3	4
5. Information given was with respect for individuality	1	2	3	4
6. Information was given with respect for my culture	1	2	3	4
7. I could share my feelings at any time	1	2	3	4
8. I was informed about changes in my labour and birth care	1	2	3	4
9. My opinions about my labour and birth were considered	1	2	3	4
10. I was given helpful suggestions by midwives about my labour and birth	1	2	3	4
11. I was given helpful suggestions by traditional counsellors	1	2	3	4



**SECTION C**

(a) How do you rate your overall satisfaction with labour and birth information you were given in preparing you for labour and birth? Choose one response.

1	2	3	4
Very	Dissatisfied	Satisfied	Very Satisfied
Dissatisfied			

(b) Do you have any suggestions for improving the labour and birth information given to first time mothers? (Circle the chosen response)

Yes 1

No 2

If yes, please explain

(c) To what extent did the following people give you useful information related to labour and birth?

### Responses

1= None

2= Some information

3= More information

4= A lot of information

1. Mother	1	2	3	4
2. Aunt	1	2	3	4
3. Friends	1	2	3	4
4. Traditional Counsellor	1	2	3	4
5. Grandmother	1	2	3	4
6. Midwife	1	2	3	4
7. Doctor	1	2	3	4
8. Mass Media	1	2	3	4
9. Other, specify	1	2	3	4

### SECTION D

Finally I will ask you some information about your background which will be useful when looking at the results of this study.

### Demographic Data

#### 1. Age

Actual.....Years

If not sure (Estimated).....Years

#### 2. Home District

Ntcheu	1
Mulanje	2
Lilongwe	3
Other, specify	4

#### 3. Ethnic background

Chewa	1
Ngoni	2
Lomwe	3
Yao	4
Tumbuka	5
Other, specify	6

#### 4. Nationality

Malawian	1
Other, specify	2

## 5. Marital Status

Married	1
Single	2
Engaged	3
Divorced	4
Widow	5
Other, specify	6

## 6. Religion

Roman Catholic	1
CCAP( Presbyterian)	2
Seventh Day	3
Zambezi	4
Anglican	5
Islam	6
None	7
Other, specify	8

## 7. Highest level of education

Secondary school education	
Never went to School	1
Standard 1- 5	2
Standard 6- 8	3
Tertiary education	4

## 8. Occupation?

House Wife	1
Teacher	2
Nurse Aid	3
Farmer	4
Clerk	5
Business	6
Unemployed	7
Other, specify	8

## 9. Whom do you live with?

Husband	1
Both parents	2
Mother	3
Father	4
Aunt	5
Grand parents	6
Mother and Father in-law	7
Other, specify	8

## 10. Where did you attend antenatal clinic? (Name of the clinic and district)

.....

11. How many antenatal visits did you make?

.....

12. At how many months of pregnancy did you start attending antenatal clinic?

.....

13. Where did the birth of the baby take place? (Name of the Institution)

.....

**USE THIS SPACE FOR EXTRA NOTES OR ANECTODAL NOTES**

## **Appendix D**

**A letter from Munro et al. permitting the adoption of instrument**

**BOSTON COLLEGE**  
CHESTNUT HILL, MASSACHUSETTS 02167-3812

SCHOOL OF NURSING  
OFFICE OF THE DEAN  
(617) 552-4251

July 10, 1995

Shane Barbera  
Librarian: Health & Human Sciences  
Edith Cowan University  
Perth Western Australia  
Churchlands Campus  
Pearson Street, Churchlands  
Western Australia 6018

Dear Ms. Barbera:

Enclosed are copies of the LaMonica-Oberst patient satisfaction scale, our 28-item revision, our 15-item revision, and the article that describes the latter. You are welcome to use them with appropriate citation. It will be very interesting to compare your results with ours, and we would appreciate receiving a copy of your results.

Good luck with your efforts. If I can be of any further help, please write or call (617) 552-4251.

Sincerely,

Barbara Hazard Munro, Ph.D., F.A.A.N.  
Dean and Professor

## **Appendix E**

### **An instrument sent to experts to assess content validity**

Dear

I would like to ask you to help me with assessing the content of this instrument. For each item indicate the extent of relevancy by choosing one number. 1 =not relevant (NR); 2=unable to assess relevance without item revision or item is need of such revision that it would no longer be relevant (UR); 3= relevant but needs minor alteration (R); 4= very relevant and succinct (VR)

If you have any suggestions or comments, please, write them at the end of the instrument.

Thanking you in anticipation.

## INSTRUMENT FOR DATA COLLECTION

I am going to ask you questions concerning your personal life, family life, information needs during pregnancy, labour and birth and your satisfaction with the information you may have received.

### SECTION A

<u>Demographic Data</u>	<u>NR</u>	<u>UR</u>	<u>R</u>	<u>VR</u>	<u>Comments</u>
1. Identification number					
2. Age	1	2	3	4	
( ) below 15 years					
( ) between 16- 18 years					
( ) between 19- 21 years					
( ) over 21 years					
3. Home District	1	2	3	4	
( ) Ntcheu					
( ) Mulanje					
( ) Lilongwe					
( ) Other, specify					
4. Ethnic background	1	2	3	4	
( ) Chewa					
( ) Ngoni					
( ) Lomwe					
( ) Yao					
( ) Tumbuka					
( ) Other, specify					
5. Nationality	1	2	3	4	
( ) Malawian					
( ) Other, specify					
6. Marital Status	1	2	3	4	
( ) Married					
( ) Single					
( ) Engaged					
( ) Divorced					
( ) Widow					
( ) Other, specify					



	NR	UR	R	VR	Comments
7. Religion	1	2	3	4	
( ) Roman Catholic					
( ) CCAP( Presbyterian)					
( ) Seventh Day					
( ) Zambezi					
( ) Anglican					
( ) None					
( ) Other, specify					
8. What is the highest level of education that you attained?	1	2	3	4	
( ) Never went to School					
( ) Standard 1- 5					
( ) Standard 6- 8					
( ) Junior Certificate					
( ) Malawi School Certificate of Education					
( ) Technical Certificate					
( ) University Diploma					
( ) University Degree					
( ) Other, specify					
9. What is your occupation?	1	2	3	4	
( ) House Wife					
( ) Teacher					
( ) Nurse					
( ) Farmer					
( ) Clerk					
( ) Business					
( ) House Worker					
( ) Unemployed					
( ) Other, specify					
10. With whom do live with?	1	2	3	4	
( ) Husband					
( ) Both parents					
( ) Mother					
( ) Father					
( ) Aunt					
( ) Grand parents					
( ) Other, specify					

## SECTION B

### Labour and Birth Information received by Primiparae

(a) Based on your experience, how important is the following labour and birth information to the first time mothers?

	NR	UR	R	VR	Comments
1. Signs and Symptoms of labour	1	2	3	4	

	NR	UR	R	VR	Comments
2.Physiological changes and needs during first stage of labour	1	2	3	4	
3.Physiological changes and needs during second stage of labour	1	2	3	4	
4.Physiological changes and needs during third stage of labour	1	2	3	4	
5.Physiological changes and needs during fourth stage of labour	1	2	3	4	
6.Psychological changes and needs during labour and birth	1	2	3	4	
7.Use of medical medications during labour and birth	1	2	3	4	
8.Use of traditional medications during labour and birth	1	2	3	4	
9.Possible complications of first stage of labour	1	2	3	4	
10.Possible complications of second stage of labour	1	2	3	4	
11.Possible complications of this stage of labour	1	2	3	4	
12.Possible complications of fourth stage of labour	1	2	3	4	
13.Indications for operative deliveries	1	2	3	4	
14.Pain relief during labour	1	2	3	4	
15.Breathing and relaxation techniques during labour and birth	1	2	3	4	
16.Indications for intravenous infusions during labour and birth	1	2	3	4	
17.Tests and procedures during labour and birth	1	2	3	4	
18.Birth defects	1	2	3	4	

	NR	UR	R	VR	Comments
19.Immediate infant care	1	2	3	4	
20.Breast feeding	1	2	3	4	
21.Characteristics of the newborn	1	2	3	4	
22.Rights, responsibilities and options1 during labour and birth	1	2	3	4	
23.Cultural beliefs and taboos about first stage of labour	1	2	3	4	
24.Cultural beliefs and taboos about second stage of labour	1	2	3	4	
25.Cultural beliefs and taboos about third stage of labour	1	2	3	4	
26.Cultural beliefs and taboos about fourth stage of labour	1	2	3	4	

(b)Please tell me any other information that you would have liked to know about labour and birth.

NR	UR	R	VR	Comments
----	----	---	----	----------

### **Satisfaction with Labour and Birth Information Received**

Women have expectations about labour and birth events and often indicate their satisfaction with the amount of information they received. From the topics below, how satisfied are you with the amount of labour and birth information you were given?

	NR	UR	R	VR	Comments
1.Signs and symptoms of labour	1	2	3	4	
2.Physiological changes and needs during first stage of labour	1	2	3	4	
3.Physiological changes and needs during second stage of labour	1	2	3	4	
4.Physiological changes and needs third stage of labour	1	2	3	4	

	NR	UR	R	VR	Comments
5.Physiological changes and needs during fourth stage of labour	1	2	3	4	
6.Psychological changes and needs during labour and birth	1	2	3	4	
7.Use of medical medications during labour and birth	1	2	3	4	
8.Use of traditional medications during labour and birth	1	2	3	4	
9.Possible complications of first stage of Labour	1	2	3	4	
10.Possible complications of second stage of labour	1	2	3	4	
11.Possible complications of third stage of labour	1	2	3	4	
12.Possible complications of fourth stage of labour	1	2	3	4	
13.Indications for operative deliveries	1	2	3	4	
14.Pain relief in labour	1	2	3	4	
15.Breathing and Relaxation techniques in labour	1	2	3	4	
16.Indications for intravenous infusions during labour and birth	1	2	3	4	
17.Tests and procedures during labour and birth	1	2	3	4	
18.Birth defects	1	2	3	4	
19.Immediate infant care	1	2	3	4	
20.Breast feeding	1	2	3	4	
21.Characteristics of the newborn	1	2	3	4	

	NR	UR	R	VR	Comments
22.Rights, responsibilities and options during labour and birth	1	2	3	4	
23.Cultural beliefs and taboos about first stage of labour	1	2	3	4	
24.Cultural beliefs and taboos about second stage of labour	1	2	3	4	
25.Cultural beliefs and taboos about third stage of labour	1	2	3	4	
26.Cultural beliefs and taboos about fourth stage of labour	1	2	3	4	

SECTION C

Satisfaction with Labour and Birth Information Giving

(a)The statements below say something different about labour and birth information giving. Think about your experience as you respond to each statement. Choose one word among the five that are given to describe your opinion.

	NR	UR	R	VR	Comments
1.My concerns and worries were attended to	1	2	3	4	
2.I felt free to ask questions	1	2	3	4	
3.I was given consistent information	1	2	3	4	
4.Information given was with respect for individuality	1	2	3	4	
5.Information given was with respect for culture	1	2	3	4	
6.I could share my feelings at any time	1	2	3	4	
7.I was informed about changes in the plan of care	1	2	3	4	
8.My opinions and preferences regarding my labour and birth care were considered	1	2	3	4	

	NR	UR	R	VR	Comments
9.I was given helpful suggestions by midwives about my labour and birth	1	2	3	4	
10.Midwives were confident about the information being given	1	2	3	4	
11.Traditonal counsellors wer confident about the information being given	1	2	3	4	
12.Information providers were honest	1	2	3	4	

(b)To what extent did the following people give you give you any useful information related to labour and birth?

	NR	UR	R	VR	Comments
1.Midwife	1	2	3	4	
2.Doctor	1	2	3	4	
3.Mother	1	2	3	4	
4.Aunt	1	2	3	4	
5.Peers	1	2	3	4	
6.Friends	1	2	3	4	
7.Traditional Counsellor	1	2	3	4	
8.Mass Media	1	2	3	4	
9.Observation	1	2	3	4	
10.Grandmother	1	2	3	4	
11.Other, specify	1	2	3	4	

(c)Among the possible information sources above, tell me whom you prefer to be the labour and birth information source. Please give reasons for you choice(s).

NR	UR	R	VR	Comments
----	----	---	----	----------

**SECTION D**  
**Overall Satisfaction with Labour and Birth Information in Preparing the First Mother for Labour and Birth**

(a)How do you rate your overall satisfaction with labour and birth information you were given in preparing you for labour and birth? Choose one response.

1	2	3	4
Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied

NR	UR	R	VR	Comments
----	----	---	----	----------

(b)Please comment on your response(Response to be on a separate sheet of paper).

NR	UR	R	VR	Comments
----	----	---	----	----------

(c)Do you have any suggestions on what can be done to improve labour and birth information giving to first mothers? (Choose one response by ticking it).

Yes ( )  
No ( )

NR	UR	R	VR	Comments
----	----	---	----	----------

(d)If your answer is Yes, please explain.(Response to be on a separate sheet of paper)

NR	UR	R	VR	Comments
----	----	---	----	----------

## **Appendix F**

### **Approval from Edith Cowan University Ethics Committee**





**EDITH COWAN  
UNIVERSITY**

PERTH WESTERN AUSTRALIA  
CHURCHLANDS CAMPUS

OFFICE OF RESEARCH AND DEVELOPMENT

Pearson Street, Churchlands  
Western Australia 6018  
Telephone (09) 273 8170  
Facsimile (09) 273 8046

**Committee for the Conduct of Ethical Research**

Mrs Address Malata

Dear Mrs Malata

**Re: Ethics Approval**

**Code:** 95-156

**Project Title:** *Labour and Delivery Information Needs and Satisfaction with  
Information Given to Primiparae in Ntcheu, Mulanje and Lilongwe  
Districts in Malawi.*

This project was reviewed by the Committee for the Conduct of Ethical Research at its meeting on 24 November 1995.

I am pleased to advise that the project complies with the provisions contained in the University's policy for the conduct of ethical research, and has been cleared for implementation, subject to gaining approval from the Faculty Higher Degrees Committee on 6 December 1995.

Period of approval is from 24 November 1995 to 28 February 1997.

Yours sincerely

ROD CROTHERS  
Executive Officer

28 November 1995

*Please note: Students conducting approved research are required to submit an ethics report as an addendum to that which they submit to their Faculty's Higher Degrees Committee.*

cc: Ms Davina Poroch, Supervisor  
Mrs Gerrie Sherratt, Secretary H.D.C.

## **Appendix G**

### **Letter to Chairman of Research Technical Committee in Malawi**

The Chairman  
 Research Unit Technical Committee  
 Ministry of Health  
 PO Box 30377  
 Capital City  
 Lilongwe 3  
 MALAWI

Through: The Principal  
 Kamuzu College of Nursing  
 Private Bag 1  
 Lilongwe  
 MALAWI

Dear Sir

**CLEARANCE TO CONDUCT A RESEARCH STUDY ON LABOUR AND BIRTH INFORMATION NEEDS AND SATISFACTION WITH INFORMATION GIVEN TO PRIMIPARAE IN MULANJE, NTCHEU AND LILONGWE DISTRICTS**

I am a faculty member at Kamuzu College of Nursing but currently studying for a Master of Nursing degree at Edith Cowan University, Perth, Western Australia. As part of the programme I am expected to conduct a research study in my country. I would therefore like to conduct a study on labour and birth information needs and satisfaction with information given to primiparae.

It is hoped that the findings will benefit the nursing and midwifery profession in Malawi because the results may describe the primiparae's satisfaction with labour and birth information they are given as well as identify labour and birth information needs of primigravidae. This information could be used to improve the current childbirth education services.

Subjects will be first time mothers who delivered a live full term infant within six weeks of the postnatal period. The hospitals proposed as research sites are Mulanje District, Mulanje Mission, Ntcheu District and Kamuzu Central hospitals. Data collection is anticipated to begin in February and end in May, 1995. Queen Elizabeth Central Hospital has been proposed to be the site for a pilot study.

Enclosed is the research proposal for the study.

I would therefore like to ask for clearance to conduct the pilot study and the actual study.  
 Thanking you in anticipation.

**PRINCIPAL INVESTIGATOR**

Mrs A M Malata  
 Edith Cowan University  
 Pearson Street  
 Churchlands  
 Western Australia 6018

**RESEARCH ADVISER**

Davina Poroch  
 Edith Cowan University  
 Pearson Street  
 Churchlands  
 Western Australia 6018

fax: 783 09

Communications should be addressed to:  
The Secretary for Health and Population



P.O. BOX 30377  
CAPITAL CITY  
LILONGWE 3  
MALAWI

MED/4/36/C/7

18th March 1996

Mrs A.M. Malata/Davina Porooh,  
Edith Cowan University,  
Pearson Street,  
Churchlands,  
Western Australia 6018.  
Fax (09)300 1257  
Dear Mrs Malata,

**RE: LABOUR AND DELIVERY INFORMATION NEEDS  
AND SATISFACTION WITH INFORMATION GIVEN  
PRIMIPARAE IN MULANJE, NTCHEU AND LILONGWE  
DISTRICTS.**

I would like to inform you that your research proposal was discussed by the Health Sciences Research Committee. The committee felt that this is a good proposal and advised that the study should go ahead.

However the committee made the following recommendations:

- (a) Exclude operative deliveries.
- (b) Bias is caused by interviewing only those mothers coming to post-natal clinic who are presumably fairly happy. The way to overcome this is study in underfive clinic.
- (c) The Questionnaire, which is more western, may need to be modified to be understood by our mothers.

I wish you all the best in your studies.

Yours sincerely,

**B.F.L. MATATIYO**  
**for: SECRETARY FOR HEALTH AND POPULATION**

**Appendix I****Letter to administration of Mulambe Mission Hospital**

The Administrator  
Mulambe Mission Hospital  
PO Box  
Blantyre  
MALAWI

Through: The Principal  
Kamuzu College of Nursing  
Private Bag 1  
Lilongwe  
MALAWI

Dear Sir/Madam

**REQUEST TO USE MULAMBE MISSION HOSPITAL FOR PILOT STUDY FOR RESEARCH PROJECT  
ON LABOUR AND BIRTH INFORMATION NEEDS AND SATISFACTION WITH INFORMATION  
GIVEN TO PRIMIPARAE**

My name is Address Malata and I am currently studying for a Master of Nursing degree at Edith Cowan University in Australia. As part of the programme I am expected to conduct a research study.

I write to ask for permission to use your hospital as a site for a pilot study whose purpose is to describe labour and birth information needs and satisfaction with information that may have been given to primiparae during prenatal, labour and birth period.

A instrument will be utilised to collect data. Participants will be primiparae who delivered a live full term infant within six weeks of the postpartum period. Their responses will be treated with total confidentiality.

There are no risks involved in this study and the results will be used only for the intended purpose.

Thank you for your co-operation and assistance.

PRINCIPAL INVESTIGATOR  
Mrs A M Malata  
Edith Cowan University  
Pearson Street  
Churchlands  
Western Australia 6018

RESEARCH ADVISER  
Davina Porocho  
Edith Cowan University  
Pearson Street  
Churchlands  
Western Australia

.....

.....

Date:.....

Date: .....

## Appendix J

### **Letter to administration of the hospitals**

The Administrator  
Hospital  
P O Box

MALAWI

Through: The Principal  
Kamuzu College of Nursing  
Private Bag 1  
Lilongwe  
MALAWI

Dear Sir/Madam

#### REQUEST TO USE

#### HOSPITAL AS A RESEARCH SITE

I am a faculty member at Kamuzu College of Nursing, currently studying for a Master of degree programme at Edith Cowan University, Perth, Western Australia, and would like to carry out a research study on labour and birth information needs and satisfaction with information that may have been given to primiparae.

It is hoped that this study will benefit first time mothers as it will provide information for improving labour and birth information giving to suit their needs.

An instrument will be utilised as tools for data collection. Anonymity will be maintained by ensuring that names of the subjects are not used in the study but rather identification numbers will be used.

Participants will be 150 primiparae, 70 will be taken from Blantyre district and 40 each from Ntcheu and Mulanje districts who will have delivered a live full term baby within six weeks of the postpartum period.

The purpose of this letter is to seek permission to use your hospital as a research site.

Thanking you in anticipation.

PRINCIPAL INVESTIGATOR  
Mrs A M Malata  
Kamuzu College of Nursing  
Private Bag 1  
Lilongwe  
MALAWI

RESEARCH ADVISER  
Davina Porocho  
Edith Cowan University  
Pearson Street  
Churchlands  
WESTERN AUSTRALIA



**Appendix K**  
**Informed Consent**

Dear Participant

**A RESEARCH STUDY ON LABOUR AND BIRTH INFORMATION NEEDS AND SATISFACTION WITH INFORMATION THAT MAY HAVE BEEN GIVEN TO PRIMIPARAE**

My name is Address Malata and I am currently studying in the Master of Nursing degree programme at Edith Cowan University in Australia. This study is part of requirement for completion of the programme. This study is an investigation of labour and birth information needs and satisfaction with information that was given to primiparae. You have been selected to participate in this study. The interview is expected to take approximately thirty minutes and you will be expected to answer questions from a instrument which will be read to you and your responses will be written by me or my assistants on your behalf.

\*\*\*\*\*

In signing this document, I am giving my consent to participate in this study. I understand that I was selected to participate in this study because I am a first time mother who delivered a live full term infant within six weeks ago.

I understand that in participating in this study, I will be expected to answer questions from a instrument. I understand that I will be asked to describe my feelings, thoughts and perceptions which relate to labour and deliver information needs of first mothers and satisfaction with information I received.

I understand that there are no known risks associated with this study and that participating in the study is voluntary. I am allowed to withdraw my consent and discontinue participation at any time. I may also refuse to answer any specific questions.

I understand that the completed instrument will be stored in a locked filing cabinet. Identification numbers, instead of names, will be used on instruments to ensure anonymity.

I understand that if I have any questions relating to the study, I can contact Address Malata at Kamuzu College of Nursing, Private Bag 1, Lilongwe or at Telephone Number 721622.

<b>PRINCIPAL INVESTIGATOR</b>	<b>RESEARCH ADVISER</b>
Mrs A M Malata	Davina Porocho
Edith Cowan University	Edith Cowan University
Pearson Street	Pearson Street
Churchlands	Churchlands
Western Australia 6018	Western Australia 6018

.....

I, the undersigned, have read the above information, understand it fully and wish to participate in the study.

Date:..... Signature or Finger Print:.....

## **Appendix L**

### **Informed consent for guardian of mothers under 19 years**

Dear Guardian,  
**A RESEARCH STUDY ON LABOUR AND BIRTH INFORMATION NEEDS AND SATISFACTION WITH INFORMATION THAT MAY HAVE BEEN GIVEN TO PRIMIPARAE**

My name is Address Malata and I am currently studying in the Master of Nursing degree programme at Edith Cowan University in Australia. This study is part of requirement for completion of the programme. This study is an investigation of labour and birth information needs and satisfaction with information that was given to primiparae. Your daughter has been selected to participate in this study. The interview is expected to take approximately thirty minutes and she will be expected to answer questions from a instrument which will be read to her and responses will be written by me or my assistants on her behalf.

\*\*\*\*\*

In signing this document, I am giving my consent for my daughter to participate in this study. I understand that she was selected to participate in this study because she am a first time mother who delivered a live full term infant within six weeks ago.

I understand that in participating in this study, she will be expected to answer questions from a instrument. I understand that she will be asked to describe my feelings, thoughts and perceptions which relate to labour and deliver information needs of first mothers and satisfaction with information I received.

I understand that there are no known risks associated with this study and that participating in the study is voluntary. She is allowed to withdraw my consent and discontinue participation at any time. She may also refuse to answer any specific questions.

I understand that the completed instrument will be stored in a locked filing cabinet. Identification numbers, instead of names, will be used on instruments to ensure anonymity.

I understand that if I have any questions relating to the study, I can contact Address Malata at Kamuzu College of Nursing, Private Bag 1, Lilongwe or at Telephone Number 721622.

PRINCIPAL INVESTIGATOR	RESEARCH ADVISER
Mrs A M Malata	Davina Porocho
Edith Cowan University	Edith Cowan University
Pearson Street	Pearson Street
Churchlands	Churchlands
Western Australia 6018	Western Australia 6018

.....  
I, the undersigned, have read the above information, understand it fully and wish my daughter to participate in the study.  
Date:..... Signature or Finger Print:.....

## **Appendix M**

### **A Malawian woman wearing a chitenje**







## Appendix N

### **A Malawian woman pounding in a mtondo**







## Appendix O

**A Malawian woman carrying luggage with nkhata on top of her head**



